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ABSTRACT

GRADES OR AGES: College. SUBJECT MATTER: Developmental psychology, the teaching of reading, teacher education, science for the grades, physical education, health education, teaching a directed reading lesson, music in the elementary school, methods and materials for secondary science teaching, high school reading, methods and materials for teaching English, history and philosophy of education, and learning disabilities. ORGANIZATION AND PHYSICAL APPEARANCE: The material suggests the application of performance-based teacher criteria to a number of courses at Milligan College. The guide is glued and stitched in a soft binding. OBJECTIVES AND ACTIVITIES: Specific objectives are given for each course. Activities are oriented around specified teacher behaviors. INSTRUCTIONAL MATERIALS: Bibliographies are given with each section. STUDENT ASSESSMENT: Performance-based assessment. (JB)

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Final Report

Project No. 2-D-058  
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DEVELOPMENT OF A PERFORMANCE BASED  
TEACHER EDUCATION CURRICULUM

Paul A. Clark, Charles Gee, and Robert Lindeman

Milligan College  
Milligan College, Tennessee

U. S. DEPARTMENT OF HEALTH,  
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## CHAPTER I

### INTRODUCTION

Milligan College has spent the 1972-73 school year in a study of the teacher education curriculum in order to develop a competency based teacher education program. In order to make the dialogue about Milligan's curriculum as meaningful as possible, Milligan faculty visited the AACTE Office to interview Karl Massanari, director of the Performance Based Teacher Education Project, and to examine his file on the subject. Staff members attended AACTE sponsored meetings in Chicago and in Atlanta on performance based teacher education and other meetings in Asheville, North Carolina, sponsored by Western Carolina State, and in Johnson City, Tennessee, sponsored by East Tennessee State. Two faculty members visited Weber State College in Ogden, Utah, for three days during the school year.

The problem under consideration. The Milligan College Teacher Education faculty, under the leadership of Dr. Paul Clark and Dr. Charles Gee, received a research grant entitled "The Development of a Performance Based Teacher Education Curriculum." The study proposed to do at least two things. (1) The faculty was to visit and have dialogue with leaders in the movement and to see some of the PBTE Programs in operation. Milligan faculty believed in order to sharpen its understanding of the PBTE technique, they should have this first hand experience and exchange of ideas with developers of the OE Elementary Education Models and others who have been able to implement such programs in their colleges. The faculty also wanted to examine modules and written materials related to performance based programs.

(2) The Milligan faculty proposed that two faculty members have some released time in order to make the contacts for dialogue and to provide leadership for the development of a performance based teacher education program at Milligan College. Hopefully, these two faculty members could lead in the development of materials or the adapting of materials to change Milligan's program from elementary through secondary teacher training classes to the PBTE model as a style of teacher training.

Background for the study. Soon after the publication of the Office of Education, Elementary Education Models in October of 1968, Milligan College faculty members heard a group of the model directors make a presentation at an AACTE meeting. These faculty members had a lengthy discussion with Dr. Gilbert Shearron from the University of Georgia after this presentation. Because Georgia is close

to Milligan College geographically and because Dr. Shearron's presentation described a program attractive to Milligan College faculty, the Milligan College group asked Dr. Shearron to come to the campus for a day of meetings which included faculty members, the public schools representatives, and student representative groups.

Dr. Shearron did come to describe his program in more detail and to suggest ways that Milligan College might have a program that is performance based. The day with Dr. Shearron included a great deal of dialogue between faculty, student, and public school representatives including questions to clarify understandings about the Georgia program and brainstorming about how these ideas might be implemented at Milligan College.

Representatives from Milligan College began talking to University of Tennessee faculty about their efforts toward a performance based teacher education program. Several meetings were held with Dr. Russel French of the UT faculty who is the director of their PBTE effort. Dr. French shared the overall plan of the developing program and the several modules which had been developed.

Milligan faculty began to develop modules which were to be used in the education semester of the teacher education program. Modules on Learning, Testing, and Innovations were developed and used with the Milligan College students. These modules have been used since the summer of 1971 and have been revised several times since they began.

During the 1971 February meeting of AACTE, Milligan faculty members heard a presentation by the Weber State College faculty about their PBTE program. A document entitled Wilkits and Basic Procedures For Their Use was especially helpful to the Milligan faculty in the development of the modules. Milligan faculty also used a book entitled The Book For The Development of Instructional Modules in Competency Based Teacher Education Programs prepared by Robert Arends and Don Masala and Wilford Weber.

Review of the literature. The Performance Based Education has enjoyed a great deal of exposure and dialogue for the last two or three years. The public schools have discussed the idea using the term "accountability" and "performance contracting." Many schools over the country have experimented with having industries contract to get the children in public schools to achieve performance through this method. The Texarkana school systems have received a good deal of attention in this area.

The biggest single effort in performance based teacher education is the effort of ten universities to become elementary models using the performance based approach. This

effort has gone through two of its proposed three stages. These two stages are the actual creation of the model and a feasibility study of the model. The last stage is the implementation stage.

A performancy based program should include at least three elements: behavioral objectives, activities designed to fulfill the objectives and an evaluation of the students' performance. The behavioral objectives must be carefully written from the students' point of view so that they can be evaluated by the student himself and by the professor. Many of the teaching objectives, up until this time, have been so general that they were not very useful to either the student or the teacher in guiding functional behavior for the student.

There is a committee on performance based teacher education which has been appointed by the American Association of Colleges for Teacher Education. Stanley Elam edited a study of performance based teacher education for this committee. This study quoted below outlines the essential elements of performance based education programs.<sup>1</sup>

There now appears to be a general agreement that a teacher education program is performance based if:

1. Competencies (knowledge, skills, behaviors) to be demonstrated by the student are
  - . derived from explicit conceptions of teacher roles,
  - . stated so as to make possible assessment of a student's behavior in relation to specific competencies, and
  - . made public in advance;
2. Criteria to be employed in assessing competencies are
  - . based upon, and in harmony with, specified competencies,
  - . explicit in stating expected levels of mastery under specified conditions, and
  - . made public in advance;
3. Assessment of the student's competency
  - . uses his performance as the primary source of evidence,
  - . takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior, and
  - . strives for objectivity;
4. The student's rate of progress through the program is determined by demonstrated competency rather than by



time or course completion;

5. The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified.<sup>2</sup>

These are generic, essential elements. Only professional training programs that include all of them fall within the AACTE Committee's definition of PBTE. PBTE leaders have pointed out that performance-based programs provide a good basis for individualization and instructional innovation. The Elam study lists the advantages and visible results of these programs.

- . much greater program flexibility, permitting students to progress at their own rate, with many alternatives and options;
- . greater attention to specific skill training;
- . greater congruity between objectives and the evidence admitted for evaluation purposes;
- . better rationalization of faculty decisions and demands affecting students; and
- . development of new facilities and technology required by PBTE.<sup>3</sup>

Milligan College is interested in beginning a program which can be maintained and continued without federal funding. For this reason, the faculty has been interested in the feasibility studies of these programs in other colleges. The literature indicates that if the program can get some outside funding for its beginning, the per student cost is not greater after the programs have been implemented. There is some evidence that the programs might even be operated at less expense after the initial costs.

A statement from the Oregon study supports this conclusion:

Given the assumption, procedures and constraints that have been outlined and the availability of monies from outside sources in the amounts specified, the program envisioned was judged economically feasible. If monies cannot be obtained from outside agencies to support the change-over cost, however, then the program simply is not economically feasible - at least not if it is to be developed within the time-line proposed.<sup>4</sup>

The experience of the Georgia feasibility study is even more hopeful.

1. The per student cost for maintaining the model program in sustained operations is the same or less than the per student cost for maintaining the present teacher education program for elementary school teachers.
2. Provided there are available funds for development, the per student cost for development of the entire three phase program is sufficiently low in comparison to the assumed cost benefits to be acquired to warrant the entire development project.
3. If only limited funds are available for program development there are other reasonable paths of action which would maintain the basic structures and specifications of the model but would require less cost. These alternatives are available in the Phase II Final Report.<sup>5</sup>

One characteristic of performance based programs is that they are field-centered. The modules included in this study exemplify the field-centered characteristic of modules. Classes which are not entirely moduled also have the field-centered characteristic. Also included are job descriptions which are being used for sophomores and juniors who are working as teacher aides and teacher assistants in the public schools. These job descriptions are adapted from the Georgia Elementary Education Model.<sup>6</sup>

The faculty at Milligan are aware of the critics of the non-basic approach. There are some of these critics who believe that the theoretical approach from the behaviorist point of view which is evident in behavioral objectives does not place enough emphasis on the affective domain for the teacher education student. Nash and Agne are most critical of the program because they believe that it underlines the status quo and does not provide for the creative work on the part of the teacher education student. They believe that performance based programs emphasize the development of professional skills at the expense of the development of the areas of feelings, values, and attitudes.<sup>7</sup> Robert Nash writes again in the Phi Delta Kappan that the performance based programs are rooted in positivism, pragmatism, and technicism.<sup>8</sup>

The Milligan College philosophical position would tend to emphasize the person and the creative in the development of students. The use of the modules in the beginning stages has tried to emphasize the human development of the teacher education student. The education faculty believes that performance based programs can be used to allow time for attention to the development of this human factor in Milligan College students.

## FOOTNOTES

1Stanley Elam, ed., Performance-Based Teacher Education. 1971.

2Elam, p. 6-7.

3Elam, p. 11.

4H. Del Schalock, "An Overview of the Oregon Elementary Teacher Education Program and Feasibility of its Implementation", Journal of Research and Development in Education, Spring, 1970.

5Charles Johnson, "An Overview of Georgia Feasibility Study", Journal of Research and Development in Education, Spring, 1970.

6University of Georgia, Georgia Educational Module Specifications for the Preparation of Elementary Teachers, p. 232-239.

7Robert J. Nash and Russell M. Agne, "Competency in Teacher Education - A proposition for the status Quo", Phi Delta Kappan, December, 1970.

8Robert Nash, "Commitment to Competency: The New Fetishism in Teacher Education", Journal of Teacher Education, summer of 1971.

## CHAPTER II

### METHODS OR PROCEDURES

The dialogue and observation phase. Upon receiving the Office of Education research grant to begin the study entitled "Development of a Performance Based Teacher Education Curriculum," the two directors of the project were disappointed that there was no released time money to provide the travel time and time for leadership to create the Milligan PBTE curriculum. In spite of this shortage of funds, the two researchers decided to proceed with their activity.

They decided that a good first step would be to visit the Director of the AACTE Committee on Performance Based Teacher Education. Dr. Clark and Dr. Gee visited Dr. Karl Massanari at the AACTE Office in Washington and examined the file of materials which he had developed in his office. A helpful suggestion which Dr. Massanari gave at this time was that Milligan College begin with a group of over-all objectives for the whole program. He further suggested colleges the project directors might visit and consultants that would be helpful to Milligan College.

A series of telephone conferences were held with Dr. Russel French about the UT program with a possibility of his making a presentation for the Higher Education Department of the East Tennessee Education Association on the topic "Competency Based College Teaching." Dr. Paul Clark was the chairman of the Higher Education Department of ETEA. Dr. French's presentation proved to be surprising. He had suggested some disenchantment with the idea in the telephone conferences, but he was quite outspoken against PBTE in the presentation. The problems which he outlined included the idea that PBTE program tended to be too complex with too many performance objectives and not enough attention to the wholeness of the teaching student in his development.

French said that the PBTE programs tend to be rigid even though they claim to be individualistic and flexible in perfecting competencies. He was critical of the diagnostic model which he said had been borrowed from the medical profession. He stated that there were ways that the learning process cannot be diagnosed and remediated in the same way that the physical body is treated by the medical profession. This meeting on October 27, 1972, attracted a great deal of attention. The college teachers present expected more of a positive statement about PBTE, but the presentation and the resulting dialogue were helpful in getting the group to think through some of the problems of the technique.

The AACTE annual meeting February 21-24, 1973, had sections devoted to PBTE. Milligan faculty participated in a meeting entitled "Tooling Up For PBTE". Especially impressive were extensive comments by Dr. James Cooper from Houston, Texas, about how to prepare college faculty for the program. Dr. Gilbert Shearron presented a useful over-view of the progress up until this point in PBTE. The annual meeting of the Association of Teacher Educators was devoted to competency based teacher education. Milligan faculty members found a discussion led by Dr. Edgar Kelly from the University of Nebraska was especially helpful. The program entitled "NUSTEP" was of special interest to Milligan faculty because it is a secondary PBTE program. Milligan has attempted to include both secondary and elementary education in its PBTE projects.

Clark and Gee went directly from the AACTE meeting to Ogden, Utah, to observe the Weber State College program. Enthusiasm for the program and the organization in the production of the materials were especially impressive. An outline summary of materials discussed in Ogden will be included in this report.

A faculty member representative attended a PBTE conference in Atlanta, Georgia, on March 12-13, 1973. He was particularly impressed with the presentations of Florida persons at this meeting. The Milligan faculty were able to obtain the Annotated Listing of Competency Based Modules and the Florida Catalogue of Teacher Competencies after this meeting. A group of Milligan faculty attended a competency based teacher education symposium sponsored by Western Carolina University, on April 17-18. A presentation by Dr. Stanley Elam on "What is the State of the Art" and "What is CBTE" by Dr. Howard Fortney were particularly impressive. The meeting gave an opportunity for dialogue with Dr. Robert Houston with whom Milligan faculty members had had a telephone conference earlier.

A CBTE Symposium at East Tennessee State in the month of May was especially of interest to Milligan faculty because of a discussion of precision teaching by Dr. H. S. Pennypacker of the University of Florida. East Tennessee State has quite a group of faculty interested in this technique. Because of the closeness of the ETSU campus, Milligan faculty can examine this related technique in greater depth.

Since Dr. Gilbert Shearron made an early visit to the Milligan campus to talk about PBTE, projector directors asked him and Dr. Keith Turkett of the ETSU Elementary Education Department to visit the Milligan campus to evaluate progress of the project. Dr. Shearron noticed real progress in the Milligan Curriculum since his first visit. He was able to make some suggestions for teacher development of Milligan's program. These suggestions included a statement about the relationships of activities to the objectives.

He noticed an over-abundance of reading and writing in the activities. While he admitted that this weakness was also characteristic of the Georgia program, he pointed out that the Milligan faculty might profit by finding other activities so that students could have a variety of ways to fulfill objectives. He suggested that the development of teaching techniques might be strengthened in the program. A fuller statement of his suggestions will be included in this paper.

Dr. Turkett suggested that in the early stages of designing Milligan's curriculum, the faculty should give attention to designing the curriculum so that it could be easily evaluated. He will continue to dialogue with the Milligan faculty on this effort.

Dr. Earl Davis, professor of Special Education, from Peabody College has made two visits to the Milligan Campus to help in the design of a competency based learning disabilities program. Because of the decline in teacher market, the faculty believe that Milligan trained elementary teachers should have the opportunity to add the competency of working with learning disabled children to help them on the job market. Milligan does plan to have a special education program to the extent that it does offer a complete program in the category of Learning Disabilities.

The PBTE Curriculum. In addition to Clark and Gee, Dr. Robert Lindeman, Mrs. Anne Bradford and Dr. Eucl Ownby formed a committee which would serve as a faculty steering committee for the Milligan PBTE activity. A larger group of fifteen faculty members who are preparing the performance based curriculum also had meetings. An excerpt from minutes of a meeting of July 1972 is quoted below.

The members of the Milligan faculty who have education courses met to discuss the beginning of a competency based teacher education program at Milligan College during July. There was a lively discussion about the character and abilities of the teacher education students which Milligan should produce. Some of the competencies named were that the student should be knowledgeable about the subject matter, have ability to evaluate, have ability to communicate, have ability to learn independently, be an identification model, have warmth and sincerity, have integrity, and that he should demonstrate his teaching competencies by using them with children in public schools throughout the teacher education program.

The steering committee decided that it would take the course translation approach. They decided to proceed by having each faculty member to prepare a syllabus which would include performance objectives and activities of the students. Each professor would present his written syllabus and report orally before the steering committee. The project directors would suggest improvements in the courses from the dialogue of these meetings. A series of these meetings continued throughout the year. The entire education faculty spent considerable time preparing the over-all objectives for the Milligan College curriculum and a rating sheet for student teachers.

Members of both committees (the larger committee included the steering committee) reported to the whole group on the results of the smaller meetings and upon their visits to the conferences and symposiums described above. Milligan College has adopted the Georgia plan of having students demonstrate their competencies in an extensive practicum each year of their teacher training beginning at the sophomore level.

The Milligan College program includes three courses or blocks of courses with related practicums. Practicum I is a sophomore level activity in which the student enrolls in Developmental Psychology for four hours credit. He attends class three one-hour periods per week, and attends practicum sessions for two-hour periods per week.



Practicum II is related on the elementary level to Teaching of Reading in Elementary School and Children's Literature. Students tutor a child in reading throughout the entire semester and spend five weeks from 8:00 A.M. to 11 A.M. as a teacher assistant in the public school. The students attend classes six hours per week except during the five week practicum period.

Practicum II for the secondary juniors includes a period of seminars, microteaching and the preparation of materials and an eight week, one hour per day practicum in the public schools.

Practicum III for both elementary and secondary students includes a five week intensive seminar period in which students study topics related to Educational Psychology and History and Philosophy of Education and eleven week practicum in the public schools. This eleven week session is similar to the traditional student teaching experience. For some time the faculty have found several team teaching centers for the students to use in this experience. This enriches the experience by getting the students to work faster and also acquaints them with innovative schools.



## CHAPTER III

### RESULTS

The problem of this research study was two-fold in that the Milligan faculty was (1) to observe PBTE programs and materials, and (2) to organize to create PBTE materials for the Milligan College Teacher Education Curriculum. The first part of this section has been reported in Chapter II. Actually, the second part of the objective which is the organization and implementation of the PBTE program at Milligan will reveal some of the success of the observation phase. The modules, syllabi and other documents included in this chapter will show the degree of implementation of the PBTE concept and the particular style of developing the competencies that Milligan has developed.

The first document shown in this chapter is a master list of objectives which the faculty developed at the suggestion of Dr. Massanari. Although the faculty have discussed them at length, they still will revise the objectives as the program develops.

The chapter next will show materials from the activities which are related to the three large practicums of the Milligan College Teacher Education Program. Practicum I is designed to be a sophomore activity. Students are assigned in this practicum to do tasks related to being a teacher aide in the public schools. In Practicum II, in both the elementary and secondary programs, the student does more teaching of groups and he does a longer unit of teaching the whole class. The greater responsibility he has in a public school classroom earns him the title of teacher assistant. Practicum III is the traditional student teaching activity. Because of the pre-student teaching practicum experiences, the student should begin at a more mature level so this experience is more like an internship.

The next part of the chapter includes three modules which were written in 1971 and have been in use since the summer of 1971. Each has had extensive revision as the result of student suggestions and other factors which seem important to the over-all objectives of the teacher education program.

The syllabi developed in the group process described in Chapter II are included next. Some of these are in more finished form than others. The professors who developed them are reporting their progress in this way toward a more complete PBTE components. The completed products will be finished more quickly because of the activities of this study.

The last section of this chapter will be the discussion of the Learning Disabilities Program. Special Education is a part of the Education Area at Milligan College. Because it is being developed at the time of the study and because of the faculty's desire that it begin as a performance based program, it has been included in this report.

OBJECTIVES FOR THE MILLIGAN COLLEGE TEACHER  
EDUCATION STUDENT

1. General Education

The teacher education student should read and discuss topics beyond those related to his vocation in religion, humanities, social studies, and science.

2. Christian Curriculum

The student should study the text of the Bible in a systematic way and have opportunity to integrate ideas related to the Christian faith with other ideas he will use as a teacher in the public schools.

3. Student Self-Direction

The teacher education student motivated by his own self-direction should read and apply research and other information from printed material and use media other than the printed page to form his own understandings and beliefs.

4. Learning in the Laboratory Setting

The teacher education student must develop his competencies as a teacher by carefully supervised series of practicums designed to apply theory, to acquire skills, and to develop his own personal style of teaching. These practicums should begin early in the teacher training program and continue throughout the program.

5. Communication Skills

A teacher education student should give evidence of ability to read the technical material of his vocation, to write his thoughts with clear prose in acceptable style, to demonstrate self discipline in his own study habits and to communicate in speech with large and small groups and with individuals.

6. Mastery of the Literature

The student should be able to demonstrate knowledge of the literature of the history of European and American education, philosophy of education, learning, motivation, human development, methodology of teaching (both the general

methodology and the specific methodology of his teaching field), group dynamics, group leadership, and education in different sub-cultures.

7. Evaluation

Students should demonstrate the ability to make behavioral objectives and teacher-made tests. The student should be able to give and interpret standardized tests in his field. The student should master some of the elementary statistical concepts which will be used by the classroom teacher such as standard deviation, percentile, and item analysis.

8. Teaching Techniques

The teaching student should develop ability to diagnose students' weaknesses and strengths at several levels of proficiency, ask questions, react to student problems, individualize the student's learning, develop an inquiry centered lesson, dialogue with students, use a media varied presentation, reinforce students (behavior modification) and analyze his own teaching techniques.

9. Sensitivity

The teacher education student should have the opportunity to develop sensitivity to another person's feelings and point of view. The student should have such a feeling of self worth that he has the poise to present his own ideas and to enjoy the give and take of the cognitive interaction with other persons. The students should be able to create an atmosphere of friendliness and psychological warmth.

10. Materials

The teacher education student should participate in and be able to direct students in some activities which will acquaint him with the services of a good library in a high school or an elementary school depending upon the teaching area. The student should demonstrate that he knows the printed and media materials in his teaching area.

### 11. Planning

The student should write a unit and a lesson plan for the traditional class. The student should also demonstrate ability to plan for individualization, remediation and team teaching.

### 12. Character

The student should give evidence of being a person of real integrity, able to accept the responsibility of leading the class. He should be able to establish a good relationship with persons in the community and with parents, and to be a worthy identifying model for children under his direction.

## Developmental Psychology Syllabus

### Objectives:

1. Students should learn current psychological principles from the text about working with children and be able to answer text questions related to these principles.
2. Students should be able to recognize and respond to the psycho-motor, cognitive, and affective developmental stages of the child.
3. Students should develop the skill of interpreting the child's life space from the data that is available about this child.
4. Students should be able to discuss and begin to use methods of motivating children to become effective, creative persons.
5. Students should be able to summarize main ideas of the psychologists included in the reading assignment.
6. Students should know some of the principles suggested by the literature dealing with disadvantaged children and the concepts basic to the modern school.
7. After a reading assignment and some seminar type discussions on behavior modification, students will respond to a test on this topic.
8. The student will summarize a reading on group dynamics and use these principles in the small group discussion in the public schools.
9. Students take the Guilford Zimmerman Temperment Survey and apply for admission to the Teacher Education Program in this class.

Textbook:     Human Development in Western Culture  
By:     Harold W. Bernard

### Outside Reading Assignment:

Students should read and report on original writings or interpretations of writings of the psychologists listed below. Readings on the disadvantaged and school techniques will be described further in class. The reading report should include

a bibliography with page numbers. The due dates will be announced.

Gesell  
Havighurst  
Piaget  
Erikson  
Skinner  
Disadvantaged  
School Techniques

Film Day:

Friday will be film day for the Developmental Psychology class. These same films will be repeated on Wednesday night at 6 o'clock. Students will be expected to see at least ten sessions and report in writing on five sessions. The material from the films may be included on tests. The student will get extra credit for attending extra sessions. The report should be half page to a page and include a list of the important points of the film or a more detailed discussion of one important point in the film or record. The film and record list will be revised each semester.

The Teacher Aide

The student will be assigned to a near-by public school as a teacher aide. Since Milligan College is exchanging service for the right to be in this classroom, the student should be careful to be faithful in his attendance at the Developmental Psychology Practicum.

Each student should write a one-page paper each week describing his activities and observations in the laboratory experience. The paper should end with a short statement about his learnings about children. Each student should also estimate the number of times he has performed the activities on the enclosed list of activities.

Tasks of Milligan Practicum I

Being a teacher aide in a public school four hours per week for one semester.

Case study emphasizing the child's learning potential.

Tutoring a child for a minimum of ten one hour sessions.

A two session unit with a small group (6 to 10) which will emphasize group discussion.

The teaching of one lesson (20 to 45 minutes).



## Activities of Aides

Number    Instructional

- \_\_\_\_\_ 1. Telling a pupil what happened, or helping him with subject material missed during absences.
- \_\_\_\_\_ 2. Helping pupils improve subject skills.
- \_\_\_\_\_ 3. Helping pupils understand teacher's directions.
- \_\_\_\_\_ 4. Interesting a restless pupil in some of the available activities.
- \_\_\_\_\_ 5. Assisting a slow pupil in finishing work or catching up.

Secretarial

- \_\_\_\_\_ 1. Makes appointments.
- \_\_\_\_\_ 2. Does clerical tasks--typing, duplicating, etc.
- \_\_\_\_\_ 3. Maintains records--health, attendance, achievement.
- \_\_\_\_\_ 4. Proctors tests.
- \_\_\_\_\_ 5. Collects money--keeps records.
- \_\_\_\_\_ 6. Scores--corrects learning experiences.

Pupil Supervision

- \_\_\_\_\_ 1. Helping pupils move from one activity to another.
- \_\_\_\_\_ 2. Assists playground activity.
- \_\_\_\_\_ 3. Monitors study activities.

Technical

- \_\_\_\_\_ 1. Sets up audio-visual materials.
- \_\_\_\_\_ 2. Operates audio-visual materials.
- \_\_\_\_\_ 3. Prepares audio-visual materials (transparencies, etc.)

Supplies

- \_\_\_\_\_ 1. Puts away and catalogues new materials, supplies, and equipment.
- \_\_\_\_\_ 2. Takes inventory.
- \_\_\_\_\_ 3. Orders additional materials, when necessary.
- \_\_\_\_\_ 4. Distributes materials.

Environment

- \_\_\_\_\_ 1. Keeps classroom neat.
- \_\_\_\_\_ 2. Checks temperature.
- \_\_\_\_\_ 3. Puts away materials.
- \_\_\_\_\_ 4. Decorates classroom as instructed.

## CASE STUDY FORM

Name \_\_\_\_\_ Birthdate \_\_\_\_\_

Height \_\_\_\_\_ Weight \_\_\_\_\_ Eyesight \_\_\_\_\_

Hearing \_\_\_\_\_ Speech difficulties \_\_\_\_\_

Obvious dental problems \_\_\_\_\_

Signs of poor nutrition \_\_\_\_\_

Illness or physical characteristics which interfere with  
learning: (List and/or describe)

Parents' vocation(s) \_\_\_\_\_

Parents' educational level (circle one)

Father	Grade S.	High S.	College
Mother	Grade S.	High S.	College

Description of home inside and outside:

Summary of conversation with parent:

Interests (Hobbies, clubs, dominate conversational topic)

Average grades:	Language _____	Social studies _____
	Science _____	Mathematics _____

Does child use correct grammar? \_\_\_\_\_

Does he use unusual descriptive words? (Illustrate)

Does the child perceive an object in more than one dimension?  
(Describe test or observed situation)

Does the child have a long attention span? \_\_\_\_\_

Is he overactive? \_\_\_\_\_

Evidence of healthy feeling of self worth: (Describe)

Description of participation in the classroom:

Does the student have friends? \_\_\_\_\_

Is he a member of a friendship group smaller than the class?  
(Describe)

Describe the teacher's subjective evaluation of the child.

Suggest learning activities which might be effective with the child.

## The Lesson Plan

The student should write a lesson plan for the one lesson which will be taught during this unit. The lesson plan should include the following five points:

1. Objectives
2. Content
3. Activities
4. Materials
5. Evaluation

The objectives should be behavioral objectives written in terms of what the student will be able to do as the result of the learning activity included in the lesson. The content should be an outline of the topics or concepts which will be included in the lesson.

Many students do not get any further than outlining the content in their lesson plans. If the student will push on to discuss or list the activities of the class, this will be helpful. For instance, the teacher will begin the class with a brief anecdote about a student teacher who writes good lesson plans. The teacher will use the overhead to show an outline of the lesson plan. Selected students will explain lesson plan outlines which they have used, etc.

The materials section might be divided into two parts. The first part would include a list of actual materials which the teacher will use, such as, an overhead machine, a transparency of the lesson plan outline, a transparency showing some model lesson plans which students have written, etc. The second part of the materials section should be a list of materials or a bibliography, which was useful to the teacher in preparing this lesson.

The evaluation section should be a prose statement about the feedback which the teacher expects from the students. This will indicate the successful fulfillment of the objectives above.

A form for the lesson plan is attached.

## LESSON PLAN

I. Objectives

II. Content

III. Activities

IV. Materials

V. Evaluation

APPLICATION FOR TEACHER EDUCATION

25

MILLIGAN COLLEGE

Name \_\_\_\_\_ Date \_\_\_\_\_

Elementary \_\_\_\_\_ Twelve Grades \_\_\_\_\_ Secondary \_\_\_\_\_

If Secondary, please check your teaching major:

Business \_\_\_\_\_ Health and \_\_\_\_\_ Mathematics \_\_\_\_\_

English \_\_\_\_\_ Physical Education \_\_\_\_\_ Science \_\_\_\_\_

History \_\_\_\_\_ Music \_\_\_\_\_ Social Studies \_\_\_\_\_

Check the tests which you have completed and for which you have scores filed in some Milligan office:

American College Test \_\_\_\_\_

Guilford-Zimmerman Temperment Test \_\_\_\_\_

Strong Vocational Interest \_\_\_\_\_

Allport-Vernon-Lindzey Study of Value \_\_\_\_\_

List three of the Milligan faculty including your major professor who know you as a person and as a student well enough to recommend you.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I have examined the teacher education curriculum and would like to be admitted to the program.

Signed \_\_\_\_\_

Classification \_\_\_\_\_

Recommendation for the  
Teacher Education Program  
Milligan College

Elementary \_\_\_\_\_ Secondary \_\_\_\_\_ Date \_\_\_\_\_

Evaluation of \_\_\_\_\_  
(Name of student)

By \_\_\_\_\_  
(Name of faculty member)

PERSONAL-SOCIAL-ETHICAL FITNESS FOR TEACHING

- |  | Good  | Average | Low   | Not<br>Qualified<br>to<br>Rate |
|--|-------|---------|-------|--------------------------------|
| 1. <u>SOCIAL ADJUSTMENT</u> . . . Does this person have the social skills which will allow him to get along well with the students and other persons with whom he will work? . . . . .             | _____ | _____   | _____ | _____                          |
| 2. <u>CHARACTER</u> . . Does this individual have the personal habits and inner motivation which will make him a worthy leader of students? . . . . .  | _____ | _____   | _____ | _____                          |
| 3. <u>POTENTIAL FOR CONTINUING DEVELOPMENT</u> . . . Does this person show evidence of interest that will help him to continue to be a student and a scholar after he becomes a teacher? . . . . . | _____ | _____   | _____ | _____                          |
| 4. <u>PERSONALITY ADEQUACY</u> . . . Is this person aggressive enough to plan activities and become a leader of his students? . . . . .  | _____ | _____   | _____ | _____                          |

On the basis of these qualities of personal-social-ethical fitness, will you please check whether you would recommend this individual for teacher preparation. If you check B or C, please encircle appropriate number of numbers:

- A. \_\_\_\_\_ Recommended  
B. \_\_\_\_\_ Recommended, but with some reservation  
reference to item 1 2 3 4  
C. \_\_\_\_\_ Not recommended  
reference to item 1 2 3 4

Please add any additional comments you may wish to make on the back of this form.

Signed \_\_\_\_\_

Position \_\_\_\_\_

Send to: Dr. Paul A. Clark  
Director of Teacher Education



## WORKSHEET FOR SECONDARY EDUCATION

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Bible 9

\_\_\_ Bible 123-4  
 \_\_\_ Bible 472

Communication 6

\_\_\_ English 111-2

Health & P.E. 6

\_\_\_ H. & P.E. 101-2; 201-3  
 \_\_\_ H. & P.E. 411  
 \_\_\_ Sociology 303

Social Studies 12

\_\_\_ History 203-204  
 \_\_\_ Economics 201-202  
 \_\_\_ Sociology 201  
 \_\_\_ Government 304

Mathematics 3

\_\_\_ Math 103

MajorHumanities 15 (Two Fields)

\_\_\_ English 201-2  
 \_\_\_ Foreign Language 211-212  
 \_\_\_ Music 351 or  
 \_\_\_ Art 320

Natural Science 8

\_\_\_ Biology 110  
 \_\_\_ Physics 103

Professional Education 24

\_\_\_ Psychology 252  
 \_\_\_ Psychology 404  
 \_\_\_ Education 407  
 \_\_\_ Education 471  
 \_\_\_ Education 472  
 \_\_\_ Education 481

Psychology 3

\_\_\_ Psychology 151

Minor

## WORKSHEET FOR ELEMENTARY EDUCATION

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Bible 9

\_\_\_\_ Bible 123-4  
 \_\_\_\_ Bible 472

Communication 12

\_\_\_\_ English 111-2\*  
 \_\_\_\_ English 354  
 \_\_\_\_ Speech

Humanities 12

\_\_\_\_ Foreign Language 211-2  
 \_\_\_\_ English 201-2\*  
 \_\_\_\_ Music 351  
 \_\_\_\_ Music 242 or  
 \_\_\_\_ Art 320\*  
 \_\_\_\_ Art 311

Social Studies 12

\_\_\_\_ History 309-310\*  
 \_\_\_\_ Economics 201-2  
 \_\_\_\_ Sociology 201

Science 12

\_\_\_\_ Physics 103  
 \_\_\_\_ Biology 103  
 \_\_\_\_ Biology 350

Health and P. E. 12

\_\_\_\_ H. & P.E. 101-2; 201-2  
 \_\_\_\_ H. & P.E. 111, 211, 311 or 411  
 \_\_\_\_ H. & P.E. 203  
 \_\_\_\_ Sociology 303

Math 6

\_\_\_\_ Math 103-104

Psychology 3

\_\_\_\_ Psychology 151

Professional Education 24

\_\_\_\_ Psychology 252  
 \_\_\_\_ Psychology 404  
 \_\_\_\_ Education 407  
 \_\_\_\_ Education 411A  
 \_\_\_\_ Education 412  
 \_\_\_\_ Education 421

\* Humanities

Academic Major

SYLLABUS OF EDUCATION 411A  
TEACHING OF READING IN ELEMENTARY SCHOOLS

Purposes of this class are:

1. To teach diagnosis of reading difficulties in the area of: Word recognition, Fluency, and Comprehension.
2. To teach as much as is possible in one semester how to remediate difficulties in the areas diagnosed.
3. To reach classroom methods from texts and writers.

The first of the semester will be devoted to diagnosis. Each student will work with a child diagnosing with the interest inventory, observation check list, standardized and informal, to include word recognition, fluency, and comprehension. When diagnosis is completed the student continues with remedial work with the child.

A log is kept which serves the following purposes:

1. It gives a record of time spent which is filed toward clinical hours for certification. A clinician needs 200 hours.
2. It gives a record of all materials used for diagnosis and remediation.
3. It gives the student a weekly check against the recommendations made from the diagnosis so that all weakness may be touched in remedial periods.
4. It gives the instructor a picture of attitudes, planning, accomplishments, consistent sequential teaching and use of materials.

Each student may be assigned a child in one of the city or county schools. (You should have access to transportation.) The instructor will contact the Johnson City city supervisor and principals or near-by county or other city schools to make arrangements. Each student is required to work at least three hours per week with a child and to keep a daily log of the work in order to give:

1. A record of time spent daily which is filed toward clinical hours for certification as a clinician. (200 hours required by IRA)

2. A record of all materials used for diagnosis and remediation.
3. The instructor a picture of attitudes, planning, accomplishments, and consistent sequential teaching and use of materials.
4. The student a weekly check against the recommendations made from the diagnosis so that all weaknesses may be touched.

Students will use for diagnosis interest inventories, observation check lists, autobiographies, diagnostic reading tests-standardized and informal so as to include word recognition, fluency, and comprehension.

When diagnosis is made students follow with remediation of difficulties for the rest of the semester.

Students are required to become acquainted with the contemporary writers and authorities on reading and their ideals for remediation in each area. The remediation notes must include the very best that each student can find for training in phonetic, contextual, visual, and kinesthetic word attack; comprehension skills of details, sequence, main idea, relationship, inference, following directions, and drawing conclusions; improving fluency through word recognition, phrasing, use of punctuation and expression.

#### Materials Available:

##### Tests for use:

1. Intelligence:
  - Pintner Non-Verbal Intelligence
  - Lorge-Thorndike Non-Verbal
  - Kuhlman-Finch Intelligence
  - Peabody Picture Vocabulary Test
2. Reading:
  - Durrell Analysis of Reading Difficulty (grades 1-6)
  - California Reading (grades 1-6)
  - Bond-Clymer-Hoyt Diagnostic Silent Reading (grades 4-6)
  - Gray's Oral Reading
3. Readiness:
  - Metropolitan Readiness
  - Harrison-Stroud Readiness Profiles
4. Study Skills:
  - Iowa Every Pupil's Test of Study Skills (4-6)

## EDUCATION 411A

Suggestions for writing objectives on logs

There are usually two methods of stating objectives; one tells what a teacher expects to do in the teaching, the other, called behavioral objectives tell what the child should do as a result of the teacher's teaching.

As a teacher at the beginning of your work you will be stating your objectives such as the following:

To diagnose	To determine
To discover	To distinguish between
To identify	To analyze

Soon the focus shifts from the teacher and the learning process to the student and the learning outcomes. Stating this kind of objectives may be done by using words and phrases such as the following:

Indicates knowledge of  
Gives evidence of understanding  
Can interpret  
Can demonstrate skill in  
Can describe  
Can distinguish

Understand the meaning of fluency

1. Recognizes words
2. Pronounces words correctly
3. Gives attention to punctuation
4. Phrases words into ideas
5. Uses expression

Comprehends the meaning

1. Recalls details
2. Gives proper sequence of events
3. States relationship
4. Gives the main idea
5. Interprets ideas related
6. Describe characters
7. Explains

Arranged below is a list of school activities in which a student teacher might have an opportunity to participate.

#### I. Class room activities

1. Observing pupil records
2. Studying pupil records
3. Directed Study
4. Study class schedules
5. Preparing a bulletin board
6. Checking roll
7. Assume charge of a study hall
8. Counseling pupils
9. Collecting teaching materials
10. Distributing teacher materials
11. Collecting Audio-visual materials
12. Care of physical condition of room
13. Use of community resources
14. Making and grading tests
15. Interpreting test results
16. Conference with individual pupils
17. Evaluating pupil progress
18. Study code of ethics
19. Make health observations
20. Assume full teaching responsibility
21. Conferences with librarian
22. Conferences with administrative personnel
23. Knowledge of First Aid
24. Planning a field trip

#### II. Routine duties

1. Collection of school fees
2. Distribution of books and materials
3. Filling out monthly and six week reports
4. Supervising play activities
5. Handling discipline measures
6. Observing pupils in the lunch room
7. Study cafeteria management
8. Keep a study hall
9. Study cumulative records
10. Preparation of report cards
11. Evaluating citizenship
12. Loading buses
13. Conference with custodians
14. Home visitations
15. Building inspection
16. Supervising halls between classes
17. Learning sources of instructional materials
18. Learn how to file instructional materials
19. Planning a bulletin board
20. Operation of motion picture and film strip projector
21. Operation of mimeograph and ditto machine

### III. Co-Curricular Activities

1. Attend faculty meetings
2. Attend assembly
3. Planning and executing assembly programs
4. Directing a play or short skit
5. Visiting and advising clubs
6. Participating in home room activities
7. Attend school parties
8. Assist in planning school parties
9. Attend Athletic games
10. Attend professional meetings
11. Share in money raising projects
12. Share in guidance and counseling

### IV. Community Work

1. Attend P. T. A.
2. Take part in community projects
3. Attend Church and Sunday School and social activities
4. List resource materials in the community
5. Help with community drives, such as Community Chest
6. Visit one civic program

Remedial Materials available in Curriculum Center:

### Evaluation:

Individual conferences  
Tests on chapters as completed  
Casework which includes: diagnosis, recommendation,  
accomplishments, bibliography  
used, future recommendations,  
hours spent with the child,  
and daily logs.  
Tests on reading for remediation.



## SECONDARY MATERIALS AND METHODS

1. The professor will guide the student in some discussion of successful approaches to traditional subject content in the subject matter field.
2. The student will prepare a six page paper which will include a summary of trends in the methodology in the specific subject matter area of his major.
3. The student will develop the skills and techniques of teaching which are especially useful in his subject matter field.
4. The student will read a designated journal in his field and review selected articles.
5. The student will receive oral and written instruction on the use of selected audio-visual equipment and techniques and pass a competency test of these skills. Some basic skills and techniques of teaching will be introduced in four microteaching experiences. Such skills as reinforcement, asking questions, establishing set, and the discovery technique will be included.
6. The student will acquire some awareness of the materials available in his subject matter area. This would include films, filmstrips, pictures, and free and inexpensive materials. He will prepare a list of these materials for his own use.

## Milligan College Practicum II

1. Some acquaintance with the record keeping in a school which should include some examination of cumulative records of students and some involvement of keeping the attendance registers.
2. If possible, the student should plan a unit with a small group of the class. This could be a group that needs special help or a gifted group which needs some supplementary challenge.
3. The student will do three days of student teaching toward the end of the practicum. These three days will be highly planned. The written plans will be approved by both the Milligan professor related to his subject matter area and the cooperating teacher.
4. The student will be a teacher assistant for one hour per day (3 to 5 days per week) for eight weeks. Suggested activities are included on the following pages.

Instructional Activities With Children

1. Taking charge of a small group working on a special project, while the teacher works with another group.
2. Making a 15 or 20 minute presentation as a part of the lesson of the day.
3. Helping pupils learn proper use of tools and equipment.
4. Telling a pupil what happened, or helping him with subject material missed during absences.
5. Working directly with pupils in a teacher-introduced art project (bulletin board, Christmas decoration, etc.)
6. Helping pupils use a teaching machine .
7. Helping pupils improve subject skills.
8. Interesting a restless pupil in some of the available activities.
9. Listening to pupils talk about themselves (family, experiences out of school, etc.)
10. Listening to a pupil read his own written story, etc.
11. Assisting a slow pupil in finishing work or catching up.
12. Acting out stories with pupils.
13. Talking quietly with a pupil who is upset.
14. Helping students look up information in a book.
15. Assisting pupils in the library (picking out books, finding information.)
16. Taking responsibility for the class for a few minutes when the teacher is called away.
17. Observing children's behavior.
18. Copying lists on blackboard.
19. Assisting with assemblies and plays.

### 1. ESTABLISHING SET

The term set refers to the establishment of cognitive rapport between pupils and teacher to obtain immediate involvement in the lesson. Experience indicates a direct relationship between the effectiveness in establishing set and effectiveness in the total lesson. If the teacher succeeds in creating a positive set, the likelihood of pupil involvement in the lesson will be enhanced. For example, one technique for inducing positive set is through the use of analogics that have characteristics similar to the concept, principle, or central theme of the lesson. By training teachers in set induction procedures and having them apply these procedures in microteaching sessions, their subsequent classroom teaching can be significantly improved.

### 2. EMPLOYING REWARDS AND PUNISHMENTS (REINFORCEMENT)

Reinforcing desired pupil behavior through the use of reward and punishment is an integral part of the teacher's role as director of classroom learning. Substantial psychological evidence confirms the value of reinforcement in the learning process. The acquisition of knowledge of specific techniques of reward and punishment and the development of skill in using them appropriately in specific situations is most important in training a beginning teacher. Experience indicates that teachers can acquire skill through microteaching practice in reinforcement of pupil learning.

### 3. DISCOVERY

One way to teach a student an idea is to tell him that idea. Another way to teach him is to show him an object, a poem, a situation and have him tell you the significant facts about this material. The module on learning asks that you do a microteaching lesson using this skill of discovery. From your own subject matter area, choose an idea or an object and present the material in this way. This discovery exercise should help the student to feel some of excitement of a scholar in your particular field. By doing discovery like a scholar would do it, a student can feel like a scientist, a historian or a mathematician for a few minutes.

#### 4. ASKING QUESTIONS

Prior to the development of probing and higher order questioning techniques comes the skill of asking questions. Too often beginning teachers lecture and tell students rather than asking questions which can elicit the answers from the students themselves. Training techniques have been developed by which teachers can see model videotapes of teachers demonstrating this skill, and by practicing in a microteaching situation increase the number of questions which they ask of students. Having achieved this goal, the emphasis can be placed on higher order questioning techniques.

#### 5. THE USE OF HIGHER ORDER QUESTIONS

Higher order questions are defined as questions which cannot be answered from memory or simply sensory description. They call for finding a rule or principles rather than defining one. The critical requirements for a "good" classroom question is that it prompts students to use ideas rather than just remember them. Although some teachers intuitively ask questions of high quality, far too many over-emphasize those that require only the simplest cognitive activity on the part of the students. Procedures have been designed to sensitize beginning teachers to the effects of questioning on their students and which provide practice in forming and using higher order questions.

#### 6. THE USE OF PROBING QUESTIONS

Probing requires that teachers ask questions that require pupils to go beyond superficial "first-answer" questions. This can be done in five ways: (1) asking pupils for more information and/or more meaning; (2) requiring the pupil to rationally justify his response; (3) refocusing the pupil's or class's attention on a related issue; (4) prompting the pupil or giving him hints; and (5) bringing other students into the discussion by getting them to respond to the first student's answer.

#### 7. TEACHER SILENCE AND NON-VERBAL CUES

Many teachers are frightened by silence or pauses in classroom discussions. They usually hasten to fill silence gaps by talking. What many teachers do not realize is that

teacher pausing can be used after: (1) Introductory statements to pressure the students into thinking about the teacher's statement; (2) questions to the students to give them time to think about a proper answer; (3) questions from the students to direct the question to another student with a look or gesture; (4) student response to elicit a continuing response.

## SYLLABUS FOR THE EDUCATION SEMESTER

Milligan College  
Summer Session, 1973

Description of the Education Semester:

The education semester includes the following courses: Psychology 404, Educational Psychology; Education 407, History and Philosophy of Education; Education 412 or 472, Materials and Methods of Education; and Education 421 or 481, Directed Teaching.

This year the student teaching will be done beginning on June 18 during the morning for five weeks. Seminars will be held during the afternoon. The education faculty has designed a program which includes a dialogue about and the practice of innovative techniques being used in education. These techniques include flexible scheduling, team teaching, micro-teaching, simulation and audio-visual presentations. The most recent innovation is competency based education, which is a form of individualized instruction.

The first two weeks and the last three weeks will be spent in rather extensive orientation to the subject matter. This will include seminars on learning and History in Philosophy of Education. Several meetings designed to teach the student how to operate the audio-visual equipment and an introduction to the microteaching component will begin on June 5.

Students are urged to consider the activities of this semester a full time activity. The more flexible schedule should not cause the student to fill his time with work or extra-curricular activities. All students who have been accepted into this program are considered to be mature, serious students with the ability to participate in a quality program of preparation for the exciting challenges which a teacher will meet in today's schools.

Textbooks:

Education 404-Learning Theories for Teachers-Morris Bigge  
Teaching in a World of Change-Robert Anderson  
Measuring Pupil Achievement and Aptitude-  
C. M. Lindvall

Education 407-History of Problems in Education-Brubacher

### Objectives of the Course:

- (1) To introduce students to some of the literature of Educational Philosophy and Educational Methodology.
- (2) To acquaint students with contemporary thought in order to help them to communicate better with their students and to help them to feel some personal maturity in the world of ideas.
- (3) To present the Christian background of education and to show how the Christian world view can be functional in educational thought.
- (4) To introduce the student to the teacher's role in the public schools, both in the instructional and the routine non-instructional facets of this role.
- (5) To integrate the Milligan teacher education curriculum into one semester of experience with the hope that theory and practice will become synthesized and functional in the life of the prospective teacher.

### Handwriting Course:

Elementary teacher education students are required to take the Zaner-Bloser Cursive Handwriting Course. There are also manuscript courses available for students who would like to take the manuscript course in addition to the cursive course. Students should obtain this material from the bookstore and begin activity immediately. Lessons should be completed, sent in to the company, and returned by the end of the semester.

### National Teachers Examination:

Students of the education semester are required to take the National Teachers Examination. Applications for this should be completed and returned to the director of the education semester by this time.

### Modules:

You will be handed modules for three units of study; learning, testing, and innovation. These modules are constructed with behavioral objectives and descriptions of activities so that the student can do the activities with a great deal of self direction. The Milligan modules include small group seminars as a part of the activities so that the student can enter into dialogue with his fellow students and a professor as he completes the activities of the module.



### Bulletin Boards:

The class will be divided into groups which will each be responsible for the decoration of Room 108 each week during the semester. Decoration should be unified under one theme. Mr. Wright will give supervision to these projects.

### Microteaching:

Microteaching involves the student teacher in short periods of actual teaching of small groups of students in the public schools. These short periods are micro-filmed and played back so that the Milligan professor and the student who is taped can view the exercise. The education faculty will provide one simulated microteaching experience and three actual sessions in the public school.

### Teaching Problems Laboratory:

Milligan teacher education students have been using the Science Research Associate Teaching Problems Laboratory for some time. Each week we will have some exercises in these laboratories in which students will role play as public school teachers to solve problems which are similar to those which a teacher faces. Students will be asked to talk about practical problems which teachers have at the end of the simulation period.

### Audio-Visual:

Milligan College has a good selection of audio visual equipment including 16 mm projectors, filmstrip projectors, cassettes, 8 mm projectors, dry mount press, overhead projectors, copy maker, opaque projectors and slide projectors. Students will be divided into groups to master the technique of using this equipment.

### Additional Activities:

There are several activities which would be profitable for the teacher education student which have not been included in the required activities of the program. For instance, there are several books on education and learning which would be most profitable. Elementary students would profit from reading a book on teaching language arts and another one on teaching social studies. The Curriculum Center now owns several films which cannot be shown as a part of the regular activities of this semester. There might be experiences in the community in the field of education which the student would like to plan. The education faculty would like to encourage students to do these additional activities. Individuals from the faculty are willing to plan or to discuss such experiences as these with the student.

## Syllabus for Audio Visual Sessions

### Objectives

1. Develop appreciation for audio visual materials as tools in the learning process.
2. Become familiar with the use and operation and maintenance of the more common projection equipment.
3. Familiarize the student with ways of making audio visual materials.
4. Acquainting the students with sources of audio visual materials.
5. Learning to select and use ready-made materials.

### Session #1

Movie projector and filmstrip projector: Each student will be checked out individually on each piece of equipment before he starts his student teaching.

### Session #2

Overhead projector and opaque projector: Each student is asked to put together a series of transparencies that he can use in teaching a lesson.

### Session #3

Mounting of flat pictures (wet and dry mounting): Each student is asked to put together a series of mounted flat pictures that he can use in teaching a lesson.

### Session #4

Ditto machine: Learn to use ditto machine by handling ditto masters and making copies.

## Milligan College Student Teacher Evaluation Sheet

The evaluator should mark performance A, B, or C in blank provided. B level and A level performances are described.

- |  |   |
|--|---|
| 1.(B) Adequate; not always consistent in communicating accurate subject content.<br>_____                                    | (A) Superior; consistent and accurate in communicating subject matter area.                                 |
| 2.(B) Aware of individual student differences.<br>_____  | (A) Provides individualized assistance.   |
| 3.(B) Assists in classroom when asked; follows directions; more follower than leader.<br>_____                               | (A) Volunteers services; anticipates needs; functions as a leader.  |
| 4.(B) Supports the teaching profession; tends to make occasional prejudiced judgements about students and teachers.<br>_____ | (A) Respects privileged information; high level of integrity.   |
| 5.(B) Knowledge of what is expected; performs accordingly.<br>_____  | (A) Grasps responsibility; functions in a way to seek more responsibility.                                  |
| 6.(B) Meets the deadline for responsibilities; ordinarily poised.<br>_____   | (A) Effectively prepared to insure poise.   |
| 7.(B) Listens to evaluation; inconsistently uses the offered suggestions.<br>_____   | (A) Learns from evaluation; consistently considers suggestions.   |
| 8.(B) Adequate but not creative lesson plans; little variety of learning activities.<br>_____                                | (A) Has necessary materials and replacements; creative lesson plans; realizes the function of lesson plans. |

- |  |   |
|--|---|
| 9.(B) Explains clearly but largely from one point of view.<br>-----  | (A) Can shift to the frame of reference of student(s).  |
| 10.(B) Pleasant; students respond positively.<br>-----   | (A) Personable; students are enthusiastic about the activity.   |
| 11.(B) Uses limited data in assessing student growth; too subjective.<br>-----                             | (A) Applies a variety of data in assessing students; molds subjectivity with objectivity.                   |
| 12.(B) Punctual; notifies of anticipated absence; some priority problems<br>-----                          | (A) Punctual and ready to perform; notifies of anticipated absence; avoids scheduling conflicts.            |
| 13.(B) Shows little evidence of reading related to teaching methodology.<br>-----                          | (A) Shows much evidence of reading.   |
| 14.(B) Tends toward yes-no or short answer responses; fears to admit lack of necessary knowledge.<br>----- | (A) Ability to ask probing and in-depth questions; admits knowledge gap rather than to give false answers.  |
| 15.(B) Successfully uses teaching equipment.<br>-----  | (A) Effectively uses teaching equipment; find new uses.   |
| 16.(B) Good classroom management; students usually profit from his leadership.<br>-----                    | (A) Excellent classroom management; Students are stimulated by his leadership.                              |
| 17.(B) Seems unaware of some personal distractors. (mannerisms)<br>-----                                   | (A) Avoids known personal distractors.  |
| 18.(B) Adequately stimulates student understanding of indicated materials.<br>-----                        | (A) Effectively stimulates student understanding of the immediate and a desire to seek further information. |

- |   |   |
|---|---|
| 19.(B) Can establish psychological climate conducive to learning.<br>_____                        | (A) Establishes psychological climate which involves students in stimulating inquiry.       |
| 20.(B) Genuine expression of interest in teaching.<br>_____                                       | (A) Vital enthusiasm for teaching; incorporates unstructured personal approach to learning. |
| 21.(B) Structured approach to learning; not overly interactive with students' interests.<br>_____ | (A) Creative teaching personality; interacts flexibly with student interest.                |

A PERFORMANCE BASED MODULE  
ON LEARNING THEORIES FOR TEACHERS

Introduction:

The performance based module on Learning Theories for teachers is designed to be primarily an experience in reading and understanding Learning Theories for Teachers by Morris L. Bigge. It will be done during an education semester during the senior year of college. The module is to be done by individual students who will be organized into discussion groups led by a professor who will organize the viewing of the films and will plan the seminars.

The module will include a list of objectives, educational activities, and ways to evaluate the module.

Pre-Assessment:

The student may elect to have an interview with the module writer and to write a short paper (six to eight pages) on the contrast between behaviorism and cognitive-field theory. If this paper indicates sufficient competency of these topics then the student may be considered proficient on the material covered in this module. In addition to the written examination, the professor in charge of the module may require the student to do the microteaching lessons which are described in the module.

Behavioral Objectives:

1. To write an examination related to the material in the text Learning Theories for Teachers by Bigge.

The examination described in the first behavioral objective will be given after the seminars which are described in this module.

2. To view a film entitled, "Controlling Behavior Through Reinforcement".

The film "Controlling Behavior Through Reinforcement" is a good illustration of the point of view of the behaviorist. and presents three schedules of reinforcement. The film will be shown so that the whole group can see it at one time

3. To participate in a seminar discussion of the contrast between realism and relativism. The relationship of these philosophical terms to the psychological theories will be included in the discussion.

The writer of the module believes that the philosophical

term which describes cognitive field might be idealism instead of relativism. The seminar session might include the discussion of this suggested change in the philosophical classification of the theories of the text. The seminar is designed to enrich the understanding of the psychological concepts and to synthesize it with material students are considering in educational philosophy.

4. To write a two page paper summarizing the concepts of reinforcement and classical conditioning. The paper should end with a statement about the significance of these concepts to the school teacher.

The paper on behaviorism should include the topics of trial and error, reinforcement, and conditioning. It should also include some statement of how the writings of Skinner and Spence have contributed to the understanding of behaviorism by the teacher.

5. To write a two page paraphrase of the material in the text book about the nature of the psychological field as described by the cognitive field theorists. This description should use some of the technical jargon of the theorists.

The paper on cognitive field should point out the significance of such topics as insight, goal directiveness, cognition and life space. The paper should include some mention of theorists and their research which have molded the cognitive field psychological theory.

6. To conduct two seminars with the professor present on the theories of learning discussed in the text. One seminar will be devoted to behaviorism and the other to cognitive field theory.

The seminar should clarify the important concepts of the two psychological theories. Students may want to review and to report on some of the writings of important psychological theorists as a part of the seminar.

7. To do a microteaching lesson on reinforcement which will illustrate the motivating power of reinforcement.

The microteaching lesson on reinforcement will be scheduled by the faculty's team leader of the education semester. A description of the reinforcement technique will be supplied to the student.

8. To do a microteaching illustration of the Gestalt "insight" with a lesson which emphasizes discovery. A

two-page report on the discovery method from reading should accompany this activity.

The discovery technique of teaching is much discussed especially by science and social studies methodologists. The paper should be a research report on the discovery method technique. The bibliography for the brief paper should include three to five sources.

9. To discuss the text chapter on transfer and the film-strip entitled Transfer of Learning in a seminar session.

Transfer is an important topic in educational psychology. The cognitive field theorists have a unique way of describing transfer. Students should read the chapter in the text, see the film and have a seminar session in which the behaviorist and the cognitive field approaches to transfer will be described.

10. The student will write a two-page summary of one of Piaget's three stages of development (pre-operational, concrete operation, or formal operational) which applies to the age group which the student plans to teach. The student will conclude the paper with a one page summary of an experience with a child which illustrates the developmental stage summarized by the student.
11. The student should read the selection by Erickson on development from Dr. Clark's reserve shelf in the library. The student should write a one page paraphrase of the developmental theory of Erickson that deals specifically with the age group he will teach.
12. The student will participate in two seminars designed to discuss the theories of Bruner. He may have a specific assignment of some presentation to make in these seminars.

The student will read Process of Education and Toward a Theory of Instruction by Bruner. The implications of Bruner's theories for educational practice will be the topic of one to two seminars. As discussion starters on Process of Education three students might be assigned five minute talks on structure, spiral curriculum and the statement, "Any subject can be taught effectively in some intellectually honest form to any child at any stage of development." A small panel might begin the instruction theories seminar with a fifteen minute discussion on how Bruner's theories present different ideas from the traditional one held by members of the panel.



Evaluation:

1. The student will have a meeting with the professor which will last from half an hour to an hour.
2. The student will submit the short papers required by the module. These will be read by the professor. If any one of the papers is not satisfactory the professor may assign the student to re-do the paper or to do other assignments which might be useful to the student.
3. The professor will hear the student participation in the seminars which should give some indication of the student's ability to use the ideas covered in the module.
4. The professor will either see the microteaching lesson or hear a report about the microteaching lesson. The lessons include a teach and re-teach session so that the student has opportunity to be evaluated and to evaluate himself before he re-teaches the same lesson.

## A MODULE ON TESTING FOR TEACHERS IN TRAINING

### Introduction:

This module based on testing for teachers is designed as an experience in (1) reading for information on standardized and informal teacher-made tests and for developing an awareness of the use of tests in life situations; (2) writing behavioral objectives; (3) constructing informal tests; and (4) handling fundamental testing statistics.

The group composed of ten to fifteen students will meet with the instructor for six sessions of one to two hours during the period of instruction. The students may work individually on the miniature modules at their own speed, seeking guidance when needed from the instructor. When a miniature module is completed students should check their work against the criteria with the instructor.

The group might want to spend some time discussing their own objectives and test items. The group might elect to prepare some of these objectives and test items on the overhead in order that the whole class might discuss them together.

Each miniature module includes a list of behavioral objectives, material suitable for supplementary reading and use in completing the work required, procedures, and criteria or evaluation.

### Materials:

Text-Measuring Pupil Achievement and Aptitude by  
C. M. Lindvall

References-Anastasi, Psychological Testing  
Buros, The Sixth Mental Measurement Yearbook  
Buros, Tests in Print  
Gronlund, Measurement and Evaluation in Teaching  
Mager, Preparing Instructional Objectives  
Stanley, Measurement in Today's Schools  
Garrett, Testing For Teachers  
Ebel, Measuring Educational Achievement

### General Objectives:

1. To be able to use The Sixth Mental Measurement Yearbook by Buros and Tests in Print by Buros to find the most useful tests for achievement, aptitude, interest, and personality.
2. To be able to write good test items for students which the student teacher will teach.

3. To read some of the literature on writing behavioral objectives and to write some of these objectives guided by the principles in the literature.
4. To consider the different levels of objectives as suggested by Bloom's Taxonomy and write objectives at these different levels.
5. To be able to define a list of terms used in testing with 90% accuracy.
6. To be able to find the percentile rank, standard deviation, and standard score and do an item analysis on a sheet which the student teacher will give and to write a short evaluation of this test.

## Module 1

BEHAVIORAL OBJECTIVES:

1. Students should evidence an understanding of the varieties and uses of tests in the evaluation of the educational process by:
  - A. Listing varieties of mental tests under the four broad categories given in the text with a note about the possible use of each test.
  - B. Writing a two page paper about why testing is important to the progress of the student. The paper should include comment of the usefulness of different kinds of tests in diagnosing students' abilities, in assessing progress of the learning process, in decision making about academic and vocational directions, and the reporting of the students' characteristics to the student himself, to parents, and to other interested parties.
2. Students should compile an annotated list of the three to five best tests in the subject matter area at the grade level in which they expect to work. The list should contain the title, authors, short but clear description of purpose of test, date of publication and publisher's address.

MATERIALS:

Chapter one in Measuring Pupil Achievement and Aptitude by C. M. Lindvall (text)

Chapter one and fourteen in Measurement and Evaluation in Teaching by Norman E. Gronlund

The Sixth Mental Measurement Yearbook by O.K. Buros

Tests in Print by O.K. Buros

Psychological Testing by Anne Anatasi

PROCEDURE:

1. Read chapter one in the text and other material which might be helpful for the activities of this module.
2. List five of the best tests under each of the four categories used in the text. The student should include a bibliography of sources which he used to compile this list.

3. The student should write the paper described in objective 1. Hopefully, this exercise will help the student think through his own philosophy of testing. He should do some reading on this topic in order to dialogue with others who have been thoughtful about the philosophy of testing. This paper should also include a bibliography.
4. Compile an annotated bibliography of tests which you described in objective 2 of this module. The student should use the Sixth Mental Measurement Yearbook by Buros and Tests in Print by Buros as resources for this activity.

#### EVALUATION:

The professor will read the list, the paper, and the annotated bibliography required by this module. The list of tests should make use of the four broad categories given in the text and should include discussion of at least the uses of tests which are outlined in the objectives. The bibliography of tests should be checked to discover if the student had found quality tests which will be useful to the classroom teacher.

## Module 2

BEHAVIORAL OBJECTIVES:

1. The students should read Preparing Instructional Objectives by Mager and write a one page summary which will include comment on explicitness, terminal behavior and the criterion of the objective.
2. Students should write five behavioral objectives in their own subject matter field which will meet Mager's specifications.
3. Students will discuss their objectives in a seminar meeting.

MATERIALS:

Measuring Pupil Achievement and Aptitude by C. M. Lindvall  
(pages 12-17)

Preparing Instructional Objectives by Mager

Behavioral Objectives by Plowman

PROCEDURE:

Students will write the one page paper on the Mager book and the five behavioral objectives and discuss the writings of behavioral objectives in a seminar meeting.

EVALUATION:

The professor will read the paper and objectives and preside over the workshop type of seminar on the writing of behavioral objectives.

## Module 3

BEHAVIORAL OBJECTIVES:

1. The students should evidence knowledge and understanding in class discussions of a taxonomy as a classification device for performance objectives. As the taxonomy is now organized it contains six major categories:
  - (1) Knowledge      (2) Comprehension      (3) Application
  - (4) Analysis      (5) Synthesis      (6) Evaluation
  - (See pages 17-20 in text)
2. Students should write a short paraphrase of each of the six major categories of Bloom.
3. Students should write two examples of behavioral objectives for each of the six categories.

MATERIALS:

Measuring Pupil Achievement and Aptitude by C. M. Lindvall  
Measurement and Evaluation in Teaching by Norman Gronlund  
Taxonomy of Educational Objectives by Bloom et al  
     (Cognitive Domain)  
Taxonomy of Educational Objectives II by Bloom et al  
     (Affective Domain)  
Preparing Instructional Objectives by Mager  
Handbook on Formative and Summative Evaluation of Student Learning by Bloom  
Behavioral Objectives by Plowman

PROCEDURE:

Students will need to read Chapter 2 of the text and at least examine Bloom's book on the cognitive domain.

Students should write the paraphrase of the cognitive categories and the two objectives for each one.

EVALUATION:

The students will be asked to evaluate the objectives of another student in the group. The professor will also evaluate the work of this module.

## Module 4

BEHAVIORAL OBJECTIVES:

The student should construct a test for the unit which he will teach in his student teaching assignment.

MATERIALS:

Chapters two, three, and four in Measuring Pupil Achievement and Aptitude by C. M. Lindvall (text)  
Measurement and Evaluation in Teaching by Norman Gronlund  
Educational Measurement by E. F. Lindquist  
Measurement in Today's Schools by Julian Stanley  
 Standardized test with manual and score sheet

PROCEDURE:

1. The student should carefully read chapters three and four in text, on the construction of teacher-made tests.
2. Students will write the following types of questions on the unit which he will teach in the student teaching experience.

Essay 3	True-False 20
Completion 5	Multiple-Choice 10
Matching 7	Statement of Correction 3

EVALUATION:

An Acceptable test will:

1. Contain a title and specify the placements of the pupil's name and date.
2. Specify clear and complete directions to the pupils
3. Contain no misspelled words and no incorrect grammar
4. Answer score sheet should be attached
5. Be typed for easy reading
6. Avoid ambiguity in questions
7. Questions in one type of objectives test should not be repeated in another type within the same overall test
8. Essay questions should avoid general and ambiguous statements.
9. Completion questions be worded so that no more than one answer is possible with no more than two blanks in the statement and those near the end of the statement, not at the beginning.



10. True-False questions should contain only one major idea expressed in simple sentence, without opinions and attitudes, without irrelevant clues, without copied sentences from the text, without arranged patterns of answer in scoring.
11. Multiple choice questions should have four alternatives, no absurd distractors, no grammatical distractors, scattered placement of correct response rather than a pattern, alternatives should be of the same or nearly same length and with correct punctuation.
12. Matching questions should be homogeneous with plausible distractors.

EVALUATION:

The professor will evaluate the tests of this module.

## Module 5

BEHAVIORAL OBJECTIVES:

1. The student should understand the terms used in testing and evaluation, and demonstrate this through defining the terms in their own words, giving an example of use in a specific situation.
2. Students will complete the programmed unit on interpreting scores which is a part of this module.

MATERIALS:

1. Measuring Pupils Achievement and Aptitude by C. M. Lindvall
2. Measurement and Evaluation in Teaching by Norman E. Gronlund
3. Measurement in Today's Schools by Julian C. Stanley

PROCEDURE:

Students locate through the use of the indexes in text and references the terms listed and understand them well enough to define each in his own words and give an appropriate situation in which each may be used.

- |                              |                            |
|------------------------------|----------------------------|
| 1. Evaluation                | 17. Standard deviation     |
| 2. Achievement tests         | 18. Standard scores        |
| 3. Aptitude tests            | 19. Stanine scores         |
| 4. Personality tests         | 20. Correlation            |
| 5. Behavioral objectives     | 21. Normal distribution    |
| 6. Range of scores           | 22. Grade placement        |
| 7. Anecdotal record          | 23. Frequency distribution |
| 8. Validity of tests         | 24. Battery of tests       |
| 9. Reliability of tests      | 25. Mental age             |
| 10. Objective measurement    | 26. Intelligence quotient  |
| 11. Essay tests              | 27. Quartiles              |
| 12. Quantitative measurement | 28. Standardized test      |
| 13. Mean                     | 29. Remediation            |
| 14. Median                   | 30. Taxonomy               |
| 15. Mode                     |                            |
| 16. Percentile Rank          |                            |

Students will complete and hand to the professor the programmed unit on interpreting scores.

EVALUATION:

Students will take a test to define and use these words in isolation and give an appropriate situation for use of each.

## Module 6

BEHAVIORAL OBJECTIVES:

Each student will do a study of the test which he has compiled for this module after he has given it to his class. The student will use the computers in the Psychology Laboratory for this objective.

MATERIALS:

Measuring Pupil Achievement and Aptitudes by Lindvall

Testing for Teachers

Measuring Educational Achievement by Ebel

PROCEDURE:

1. The students will find the standard deviation for scores in this test. He will also convert the raw scores to standard scores (z scores) for this particular test.
2. The student group will determine the percentile rank of scores on this test.
3. The student group will do an item analysis for this test to assign statistically a score for the success and difficulty of each item. The short method described on pages 235-239 in Garrett's Testing for Teachers will be used.

Evaluation:

The professor will need to work closely with the student groups in this module. He will evaluate the work at the end.

## PERFORMANCE BASED MODULE ON INNOVATION IN THE SCHOOLS

Introduction:

In order for the Milligan College teacher to be equipped or perform in an innovative, modern school this module on innovations is included in the education semester. The education faculty is committed to educational innovations in Milligan College's program. In order to help the student get an experience with innovations, the faculty used ideas from recent educational practice to plan most of the activities of the education semester. Such innovations as team teaching, simulation, microteaching, flexible scheduling, individualized instruction, and even this module which are all included in Milligan's education semester, are evidence of this influence.

During the 1971-72 school year Milligan College was involved in a Kettering Foundation sponsored plan in many of the public schools which served as centers for the student teaching activity. This individually Guided Education Program is a program which makes use of many of the innovations which will be studied in this module. Perhaps the most relevant performance related to this module will be done by student teachers in the IGE schools. However, the other activities of the module should give the student an introduction to educational innovation which should be useful to him.

Estimate of time: (2 to 3 weeks or approximate 30 hours)

Pre-Assessment:

The student who presents evidence of considerable experience and of recent reading on the topics which are emphasized in this module may be exempted from doing the activities of the module. The student should present this evidence to the director of teacher education. He will possibly be asked to summarize in writing the experience and reading he has completed.

Behavioral Objectives:

1. To read the text Teaching in a World of Change by Robert H. Anderson.
2. To participate with a group of eight to fifteen students in a seminar type discussion of the non-graded school, team teaching, staff differentiation, and individualized education. Each student will do a paper on one of the four educational innovations mentioned above. This paper should be six pages long and have a bibliography. The student should have read from at least five to ten modern sources for this paper.

3. Students should see the films "No Bells Ring", "Make a Mighty Reach", and "Tuesday".
4. Each student should hear the tape entitled "The Nongraded School" which features Robert Anderson and Evelyn Carswell.
5. Students will make a field trip to innovative schools in the community. Schools often visited include Tusculum View Elementary School in Greeneville; John Hay Elementary School in Morristown; Evans Elementary School in Erwin; John Sevier Junior High School, Ross Robinson Junior High School, and Dobyns Bennett High School in Kingsport.
6. Each student should write a two page paper about why innovations are necessary and how innovative plans in the past have attempted to meet the needs of society. Students might discuss such plans as the Eight Year Study, the Dual Progress Plan, the Dalton Plan, and the Winnetka Plan in this paper. (Charleton W. Washburne is one of the authors of the Winnetka Plan.)
7. Do a short reading summary (one-third page) on six of the lists of changes attached to the module.

#### Educational Activities:

The students who are enrolled in the education semester will be organized into groups of eight to fifteen. These groups will form the discussion groups described in this module. The groups should arrange to see the films, hear the tape, and make the field trips described in the objectives. The seminars will be attended by a professor and will be scheduled cooperatively by the professor and the students of the discussion groups.

#### Evaluation:

1. The professor assigned to the seminar group will evaluate each of the students on each of the objectives and the performance related to the objectives.
2. This professor may want to give a written examination at the conclusion of the activities described in the module.
3. The student may be evaluated on his skill in adjusting to the innovative organization and techniques of the innovative schools in which he does his student teaching.

## SCIENCE FOR THE GRADES

## Module Approach

Format: General (educational) objectives will be stated and then a study followed by specific (instructional) objectives.

Competencies teachers will apply in meeting their job responsibilities.

A subject, skill, or a general objective.

1. Gain confidence with science apparatus.
  1. Distinguish between pieces of science equipment and know potential uses for each.
  2. Be able to manipulate equipment to promote the teaching of intended concepts.
  3. Set up an entire laboratory activity using Science Curriculum Improvement Study (SCIS) materials.
  4. Explore the SCIS kits of equipment which are appropriate to their grade level expectations.
2. Gain confidence with science software.
  1. Learn the philosophy of SCIS and other project materials.
  2. Know the learning theory involved in teaching children.
  3. Demonstrate an understanding of evaluative skills needed in the elementary science area.
3. Apply teaching techniques to science.
  1. Cultivate a technique of asking effective questions.
  2. Recognize the process of inquiry teaching.
  3. Experiment with the discovery approach to learning.
  4. Present effective demonstration lessons and critique them as well as other lessons.
  5. Discover techniques appropriate to science teaching for their individual styles.
4. Recognize that science is involved and interrelated with other disciplines.
  1. Identify those ways in which science supports other academic learning.
  2. Analyze ways in which science development is enhanced by other academic knowledge.

6. Demonstrate an understanding of the content within the course.
  1. Apply information to successfully pass test instruments designed to assess student growth.
  2. Apply the previous content to new areas of study.
  3. Illustrate the interdisciplinary capability of scientific knowledge.
7. Recognize the importance of systematic planning and reactivity.
  1. Understand the specific level of anticipated student performance within each SCIS, "SS kit.
  2. Reorganize time allocations to avoid failure compliance with deadlines.
  3. Work through the planning stages which will support the development of a meaningful unit in science.
8. Exhibit a genuine interest in the teaching of science.
  1. Express a genuine pleasure with the possibility of having the responsibility of teaching science.
  2. Open attitude toward new experiences and challenges.
9. Recognition that science can be stimulating and fun.
  1. Demonstration teaching will be used to stimulate the idea that science can be fun.
  2. Manipulate apparatus and data so that you confident with these necessary tools. Apply these tools confidently in laboratory and classroom exposures.
10. Awareness of the necessity for continual updating on ones knowledge in science.
  1. Develop a regular reading program in periodical journals related to elementary school science.
  2. Integrate a search for science information with other course efforts.
  3. Recognize that new information is constantly being presented for consideration and study.
  4. Carefully analyze all data prior to accepting and data.
11. Manipulate ideas in a communicable way.
  1. Analytically state hypotheses of expected relationships.
  2. Understand object's levels of learning as they relate to meaningful science experiences for students.
  3. Confident expression of your individual ideas.

## FOR FUNDAMENTAL CONCEPTS

The goals of this course are to have the students:

1. Be able to form a concept and state it clearly and concisely as in a definition.
2. Be able to generalize (to start with examples of events which have certain properties in common and make a general statement which takes care of all the cases given as examples)
3. Be able to write proofs (start with certain agreed upon information and arrive at another fact by logical argument.)
4. Be able to solve problems (start with given information and form conclusions which answers the questions asked.)

NOTE: If a student does 4, he should automatically do 3, and then try 1. He should be able to use it for 2, if he finds it is actually provable.

Activities:

1. With compological tutors try the truth value statements, their denials, their conjunctions, their disjunctions, their implications until the rules of logical structure are discovered.
2. Definitions of set containment, set equality, and the set operations are stated and theorems of set operations are given and the student is required to write proofs of these theorems that are given.
3. The natural numbers and their properties are given then the whole numbers, integers, rational numbers, and real numbers are defined in terms of the preceding one and the properties of the system are determined.
4. The students are given examples of problems, geometric properties, sequences, etc., and asked to write whatever properties these suggest. This is for a 2 week period. The generalizations are turned in read and returned. The student is then asked to prove or disprove every claim he has made.
5. In Geometry, we start with geometric ideas the student is familiar with and he is asked to define them. I supply



exceptions that do not fit the concept until he puts enough restrictions on his original statement to have a definition. This also involves an arranging problem as no one is allowed to use a geometric term which has not first been defined.

6. There follows a section on problem solving which is presented that with this structure already known these problems can be solved and the student is to produce solutions.

- 2) and 3) relate to goal 1
- 1) and 4) relate to goal 4
- 5) relates to goal 3) and
- 6) relates to goal 2)

## PHYSICAL EDUCATION FOR PUBLIC SCHOOLS

General Objective:

To have knowledge, skill, and appreciations for the elementary school physical education program.

Specific Objectives:

1. To recognize the developmental characteristics, needs, and interests of boys and girls at various age levels.
2. To understand the physical education program and its basis.
3. To understand and be able to use effective teaching techniques and class management techniques.
4. To develop physical fitness and physical efficiency.
5. To develop knowledge, skill, and appreciation of locomotor skills.
6. To develop knowledge, skill, and appreciation of non-locomotor skills.
7. To develop knowledge, skill, and appreciation of skills relating to specific sports and dance movements.
8. To develop knowledge, skill, and appreciation of rhythm and grace in all body movements.
9. To develop knowledge, skill, and appreciation of skills relating to the handicapped child in physical education.

Instructional Objectives:

1. To be aware of information concerning physical education in the elementary schools.
2. To construct sample lessons over four physical education units.
3. To practice teach activities within specified units as outlined in mini-modules.
4. To receive "on-the-job" experiences in teaching 4 physical education units for a total of 12 half hour lessons in the public schools.
5. To thoroughly study the child's abilities and disabilities with a view towards aiding that child.

Prerequisites:

1. Developmental psychology: Knowledge of characteristics of children.
2. Knowledge of experience with children.
3. Experience in physical education activities.

Pre-Assessment:

(Before the on-the-job" experience in undertaken)

1. Understanding of pupil characteristics .
2. Understanding of a physical education and the specific units to be taught (materials, etc.)
3. Understanding of effective classroom management and procedures (discipline).
4. Understanding of effective teaching techniques (methods of teaching)

Instructional Activities

1. Read Text: Dynamic Physical Education for Elementary School Children; 4th edition; Victor P. Dauer-Burgess Publishing Co., Minneapolis, Minn. 1971.
2. Utilization of Game Card File by Helen Ricahrdson
3. Viewing of film loops, film strips, and movies as assigned.
4. Critiquing current articles, etc. on physical education in the elementary schools.
5. Observing 2 class periods of a physical education program.
6. Teaching physical education to elementary school children (So. O. #4) as a teacher's aide, team teacher, and master teacher.
7. Keeping a cumulative folder over all outside of class experiences.
8. Doing one case study on an unfit child.

Remediation:

1. Individual conferences will be held after each set of 4 "on-the-job" experiences for self-improvement.
2. Individual constructive criticism will be given on all in class work for self-improvement.

Post-Assessment:

1. Tests over knowleuges learned
2. Tests over skills learned
3. Acceptance of critiques
4. Acceptance of the cumulative folder
5. Acceptance of the case study
6. Acceptance of mini-modules

Mini-Modules:

1. The child-characterisitics, needs, interests, etc.
2. Basis for a physical education program
3. Unit planning a physical education program
4. Lesson planning a unit

5. Classroom management-discipline and conduct
6. Teaching techniques
7. Movement education
8. Physical fitness and posture
9. Perceptual motor competency & learning disabilities
10. Equipment and supplies
11. Stunts and tumbling
12. Individual & duo sports
13. Team sports
14. Combatives
15. Relays
16. Rhythms and dance
17. Games, story plays, and drama
18. Integration with other subjects

#### Mini-module-Movement Education

##### General Objectives:

To familiarize the student with the various aspects involved in the understanding and teaching of movement education.

##### Specific Objectives:

1. To distinguish movement education from all other aspects of physical education.
2. To afford the opportunity for personal experience in movement education.
3. To observe children's performances in a lesson on movement education.

##### Instructional Objectives:

1. Constructing a sample unit in movement education.
2. Preparing a lesson plan in movement education.
3. Teaching the prepared lesson plan in movement education to peer group and/or video-tape group.
4. To teach a movement education unit in the public schools to a specific grade and class of students.

##### Prerequisites:

Completion of units 1, 2, 3, 4, 5, and 6

##### Pre-assessment:

Satisfactory completion of specific objectives



Instructional Activities:

1. Read chapter 6 in assigned textbook.
2. Read "Learning Through Movement Education"  
Johper; April, 1968. p. 68 by Naomi Allenbaugh
3. View the 8 film loops on Movement Education in the Curriculum Center.
4. Attend a seminar on movement education
5. Spend one hour in observation of movement education
6. Teach one hour in a public school movement education as a master teacher.
7. Keep a report folder on all observations and teaching units.

Remediation:

Attend a personal conference with master teacher and the professor for constructive criticism before the next teaching module is undertaken.

Post-assessment:

1. Pass a test of knowledge.
2. Receive a satisfactory in the evaluative conference concerning the teaching experience.

## SYLLABUS

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### HEALTH EDUCATION 411

#### I. Statement concerning contents:

This course is designed to impart knowledge of the principles of health education and health education practices. Emphasis is placed upon methods and techniques that can be used by the teacher. Three broad areas are included—healthful school living, school health services and health instruction.

#### II. Philosophy:

The teaching of health education is directed toward improved health behavior of students and improved health conditions in the home, school and community.

Health is that quality of life which enables the individual to live most and to serve best. Every teacher is a health teacher by the example he sets before the students during his schedule of activities. By observation the student will determine if the teacher is living a balanced life—a life that consists of a balance of work, play, love, and work-ship.

It is also felt that a happy teacher is a healthy teacher.

#### III. Definition of Health Education:

Health Education is the translation of what is known about health into desirable individual and community behavior patterns by means of the education process. (Knowledge + changing attitudes = action or practice)

#### IV. Basic Aims of Health Education:

- (1) To provide the student with pertinent information about the health needs of young people and of home, school and community, suggesting, in so doing how these needs may help to point the direction of health instruction.
- (2) To help the students understand that health education is a part of the total school curriculum and should contribute to the target goals of education in our democracy; and
- (3) To furnish the student with practical suggestions for planning and carrying out effective health teaching based on health needs and employing sound educational procedure.

#### V. Behavioral Objectives:

1. To discuss the material covered in the text.
2. To critique a related article for each chapter from a professional magazine.
3. To experience using available instructional materials and equipment

4. To construct a teaching unit and present a portion of the unit in class.

The unit plan consists of:

- A. Title of unit (workable title)
- B. General objectives of unit, stated in terms of student accomplishment
- C. Suggested approaches (how the unit may be introduced)
- D. Body of unit (content of material to be covered)
- E. Activities
- F. Plan for evaluation

VI. Bibliography:

Text: Ruth E. Grout, Health Teaching in Schools

Others: Willgoose, Health Teaching in Secondary Schools

NEA-AMA, Health Education

Jarvis, Teaching in the Elementary School

Willgoose, Health Teaching in the Elementary School

Byer, Drugs, Alcohol and Tobacco

Burt, Education for Sexuality

ASHA, Teaching About Drugs, K-12

Nemir, The School Health Program

## TEACHING A DIRECTED READING LESSON

## Proficiency Module: Teaching a Directed Reading Lesson

General Objective:

You should become proficient in the knowledge and understanding of the Directed Reading Lesson and in the teaching of a Directed Reading Lesson to students. Proficiency will be assessed by means of objective tests and observations of actual classroom teaching.

Specific Performance Objectives:

You should be able to do the following:

1. answer objective questions concerning the process of teaching a directed reading lesson with 90% accuracy.
2. Prepare a plan for a directed reading lesson.
3. Write a paper, comparing and contrasting the lesson plan formats found in three basal reader series used in Carter County or surrounding areas.
4. Demonstrate the ability to teach a Directed Reading Lesson effectively.

Teacher Behaviors:

Since the Directed Reading Lesson is a vehicle for teaching various reading skills, the behaviors will be expressed in terms of teacher behaviors. Elicited student behaviors are listed in other modules.

Teacher behaviors expected by the completion of the module are as follows:

1. Utilizes effectively a lesson plan found in a teacher's manual of a basal reading series while teaching a student or a group of students.
2. Asks appropriate questions and stimulates discussion aimed toward motivating students' interests in reading a selection.
3. Raises appropriate purposes for reading a selection.
4. Compares and contrasts in writing the lesson plan formats of three basal reader series used in Carter County schools or in surrounding area schools.
5. Lists and explains in writing the six phases of a directed reading lesson, including activities and purposes of each phase.
6. Makes effective use of student responses as springboards of comprehension skill building.



### Procedures:

If you believe yourself to be proficient in the knowledge of teaching a directed reading lesson, you may begin by taking the pretest. It will be scored immediately.

If you do not meet the criterion score on the pretest, work with the Reading Resource Teacher to decide a way, or ways, to become proficient in this skill. The possible ways are listed under Step 4, below. In addition to the activity or activities selected in Step 4, perform all of the activities suggested in Step 5 below. Materials and activities suggested in Steps 4 and 5 are described in the appendix. All materials that you prepare as part of Step 5 will be checked by the Reading Resource Teacher. When you think you are ready, get a copy of the posttest from the Reading Resource Teacher and take it. Have the test scored immediately and then go over the results. In conference with the Reading Resource Teacher, decide on any additional work that is needed. When you and the Reading Resource Teacher are satisfied that you are proficient in this area, go on to another module.

The specific steps to be followed are as follows:

1. Take pretest (if you have considerable previous knowledge about teaching a directed reading lesson.)
2. Review pretest results with the Reading Resource Teacher (if you took pretest)
3. Decide way (or ways) to become proficient if you show need
4. Proceed through one or more of these alternate learning routes, following the instructions presented in the appendix:
  - A. Use micro teaching film #6 and accompanying listening guide
  - B. Read chapter 22 (pp. 488-555) in Betts' Foundations of Reading Instruction
  - C. Attend a workshop session with the Reading Resource Teacher
5. Complete these additional activities:
  - A. Prepare a lesson plan for a directed reading lesson at a level appropriate for students you teach
  - B. Teach a directed reading lesson, using the lesson plan that you prepared
  - C. Compare and contrast in writing the lesson plan patterns of three series of basal readers used in Carter County Schools or surrounding area schools
  - D. Teach a directed reading lesson, using the lesson plan in a basal reader manual
  - E. Read mimeographed selection of a directed reading lesson

6. Take posttest
7. Go over posttest results with Reading Resource Teacher
8. Follow suggestions of Reading Resource Teacher in cases of weakness
9. Go on to next module after showing 90% proficiency in this area.

## MUSIC 351

(Required of all elementary education students)

Objectives:

1. Students are acquainted with materials for singing, playing and listening.
2. Students demonstrate ability to play the autoharp, resonator bells and recorder in addition to other rhythm instruments.
3. Students have a basic knowledge of instruments of the orchestra.
4. Students understand basic notation and some methods for teaching it.
5. Students are acquainted with major composers and musical forms.
6. Students have experience in planning and presenting lesson plans for differing levels using both classroom methods and learning packets.
7. Students are aware of musical periodicals, as exhibited by written reactions to articles from these periodicals.
8. Students have knowledge of many activities that can be used with elementary students.
9. Students shall observe one music lesson being taught in a public school classroom and shall write a critique of this observation.
10. Students shall watch one telecast of a children's TV show and critique for musical value.

Basic Musical Notation:

1. Staff
2. Clefs
3. Note values and rests
4. Letter names
5. Time signatures
6. Key signatures
7. Major scales
8. Minor scales
9. Whole tone scale
10. Pentatonic scale
11. Chords

Basic musical terminology

Types of music

Importance of music to every day life

## LEVEL 1

Characteristics of child

Note values presented through walking, running, etc.

Discussion of first grade books

Listening activities:

1. High and low
2. Fast and slow, i.e., Haydn-Surprise Symphony
3. Loud and soft " " "
4. Orchestral instruments, i.e., Rusty In Orchestraville
5. Story Elements, i.e., Once Upon a Time Suite  
(Bowmar Records)
6. Form, i.e., Debussy - "Colliwogg's Cakewalk"  
"Baa, Baa, Black Sheep"  
"Angel Band"
7. Drama, i.e., Once Upon a Time Suite
8. Creativity, i.e., Saint-Saens-Carnival of Animals  
TV commercials

Singing:

1. Tone matching games
2. Types of singers
  - A. Singer
  - B. Near-singer
  - C. Non-singer
3. Types of voices
  - A. Play
  - B. Speaking
  - C. Singing
4. Methods of teaching songs
  - A. Rote vs. note
  - B. Whole vs. phrase
5. Form-Old MacDonald ABA  
Baa, Baa, Black Sheep ABA  
Angel Band AB  
I Bought Me a Cat cumulative
6. Fast and slow-I Bought Me a Cat
7. High and low-Whatever Can That Be  
Hickory, Dickory, Dock
8. Actions songs

Instruments:

1. Resonator bells
  - A. Arrange in order-tone matching
  - B. Play simple tunes
  - C. Accompany

2. Sticks
3. Xylophone
4. Autoharp
  - A. Play with teacher
  - B. Play with fellow student
  - C. Play alone
5. Creating melodies on a pentatonic scale

Rhythm:

Note reading and creativity are included in all these activities.

Discussion:

TV shows such as Sesame Street, Captain Kangaroo, and Saturday morning cartoons as to musical value.

Emphasis:

Placed on total body involvement in musical experiences.

## LEVEL II

Continuation of all Level I activities

Characteristics of child

Listening:

1. For familiar tunes - i.e. Children's Symphony  
American Salute
2. Form-American Salute-theme and variations  
Children's Symphony-ABA
3. Like phrases
  - A. Within a song
  - B. In different songs
4. Songs that start or end alike-i.e.
  - "Three Blind Mice"
  - "Mary Had a Little Lamb"
  - "Hot Cross Buns"

Instruments:

Accompany songs with chords played on resonator bells

Singing games

Making up tunes for poems and vice versa

Bouncing balls or balloons in time to music

Learning letter names of notes by spelling words on a staff

Continued work with pentatonic scale adding natural minor and major scales

## LEVEL III

Characteristics of child

Continuation of previous activities

Singing:

1. Rounds
2. Emphasis on diction, enunciation, and tone production
3. Songs from an operetta; discuss form and story of the operetta

Folk games:

1. Already outlined
2. Make up a new one for a song they've learned-i.e.,  
Brother Come and Dance With Me.

Listen for:

1. Story, i.e., Cinderella  
Saint-saens-Danse Macabre
2. Story and Instruments, i.e., Peter and the Wolf
3. Form:
  - A. Minuet
  - B. Waltz
  - C. Gavotte
4. Absolute vs. program music
5. Meter

Conducting Patterns for 2, 3, 4

Instruments:

Compose, perform, and conduct a rhythm score

## LEVEL IV

Characteristics of child

Continuation of previous activities on a more advanced level.

Instruments:

1. Detailed study of the instruments of the orchestra
2. Begin learning to play the recorder

Creativity and experimentation in composition

Part singing:

1. Rounds
2. Echos
3. Dialogue
4. Chants

5. Descants
6. Instruments
7. Partner songs

More musical terminology-these terms should be introduced as encountered in the music studied and discussion.

Listening:

1. Form-i.e., Skater's Waltzes  
Symphony  
Suite
2. To compare-i.e., Beethoven-Symphony No. 6  
"Storm"  
Grove-Grand Canyon Suite  
"Cloudburst"
3. Draw reactions to music (emphasis on type lines and colors.)

LEVELS V AND VI

Characteristics of child

Continuation of previous activities

Instruments:

1. continuation of recorder studies
2. recorder ensembles
3. introduction of informal instruments such as guitar or ukelele

More ear training:

1. singing intervals
2. singing chords as accompaniment for a melody-i.e., Silent Night

Experimentation in composition:

1. serial technique
2. given a title, compose a piece to fit that title using any medium available.

Emphasis:

Musical periods, forms, and styles relating this to social studies, etc.

## MUSIC 451

(Required of all music majors planning to certify)

Materials covered for 451 are basically the same as for 351 with more depth and more practical learning experiences for the individual student. Less time is devoted to basic notation and terminology as the music major should already be acquainted with these. The following are projects required of Music 451 students.

Projects:

1. Students shall keep a daily log of activities done in class.
2. Students shall plan and present in class a music lesson for levels one and six.
3. Students shall plan two units for individualized instruction. (One for primary level and one for intermediate level.)
4. Students shall begin a file including pictures (general and instrument); lesson plans, music catalogues, lists of music, books, records, instruments, etc. that they have as well as lists of such that would be helpful in their teaching.
5. Students shall observe and critique several music classes in the public schools including one TV and one Kodaly class.
6. Students shall watch one telecast of Sesame Street and one other children's TV show and critique for musical value.
7. Students demonstrate proficiency in playing the following instruments:
  1. Resonator bells
  2. Autoharp
  3. Recorder
  4. Guitar
8. Students are aware of musical periodicals as exhibited by written reactions to articles from these periodicals
9. Students demonstrate ability to intelligently choose a music series through an evaluation of several different series and drawing conclusions from the evaluation.



## MUSIC 452

(Required of all music majors wishing to certify)

Projects:

1. Student is acquainted with types of curriculum and materials and methods to be used in secondary levels.
2. Student is aware of budget details as demonstrated through the preparation of such in class.
3. Student demonstrates ability to make an effective bulletin board
4. Student demonstrates ability to plan a unit including daily lesson plans for seventh or eighth grade levels.
5. Student demonstrates ability to plan a concert program for senior high level.

Music 452 shall discuss in depth the following:

1. Curriculum for secondary levels.  
Pros and cons of different courses i.e., general music courses.
2. Materials and methods for courses on the secondary level.
  - A. Changing voice
  - B. Determining makeup of choral groups
  - C. Methods of grading
  - D. Testing or no?
  - E. Choosing choral literature
  - F. Content of general music class
  - G. Content of theory and history classes
  - H. Festivals and contests
3. Planning a budget
  - A. Looking ahead to take care of needs
  - B. Fund raising
4. General philosophy of music at the secondary level including discussion of the type person the student is and the type person the teacher must be.

Projects:

1. Student shall create a unit for use in a seventh, or eighth grade general music class including materials, objectives, bibliography, follow up, and correlating materials for the overall unit as well as for each of five daily lesson plans which he also outlines. One of these lesson plans shall be presented in class.
2. Student shall plan and complete a bulletin board to correlate with his general music unit.
3. Student shall plan a choral concert for senior high based on a theme of his choice stating why each piece was chosen and commenting on any problem spots in each piece. He must also design a copy of the program and present one piece of music to the class as he would initially introduce it to a choir.

4. Student shall continue his log of class activities.
5. Student shall observe and critique several secondary music classes including one general music class and one choral rehearsal.

## EDUCATION 471-C

## Methods and Materials for Secondary School Science Teaching

Enrollees:

Students who enroll are either majors or minors in science and are intending to complete certification requirements. It is anticipated that each student will participate prior to student teaching.

Course Format:

Teacher competencies are indicated as numbered headings and specific outcomes are listed as subordinate(s) to the competency.

1. Demonstrate understanding of the content within the course.
  - A. Involvement in lecture-discussion presentations which indicates an alertness to, and knowledge of the content.
  - B. Apply the material to effectively respond to a situational take-home final examination.
  - C. Awareness of existing curricula in science and trends toward science curriculum modification.
2. Recognize the importance of sequential planning and punctuality.
  - A. Understand the specific level of anticipated student performance within each planned science lesson.
  - B. Reorganize time allocations to avoid late compliance with deadlines.
  - C. Work through the planning stages which will support the implementation of a meaningful unit in science.
3. Apply teaching techniques to science.
  - A. Cultivate a technique of asking effective questions.
  - B. Experiment with the discover approach to learning.
  - C. Discover techniques appropriate to science teaching for their individual styles and apply these. (i.e. demonstrations, experiments)
  - D. Present a well planned, meaningful and effectively presented demonstration.
  - E. Participate in a group problem situation which explores the dynamics of group interaction as a learning device.
4. Gain confidence with science apparatus.
  - A. Distinguish between pieces of science equipment and know potential uses for each.
  - B. Manipulate equipment in a manner which promotes student learning of intended concepts.
  - C. Examine catalogs with reference to the selective purchase of needed apparatus.

5. Develop an effective evaluation frame of reference.
  - A. Identify those components which can be evaluated within a science program.
  - B. Prepare unbiased test items of the following types: (multiple-choice; true-false; matching; essay, cyclic; drawings to label)
  - C. Examine data related to student grades and arrive at a defensible grading system.
  - D. Isolate those factors which will require other than paper and pencil evaluation in science.
6. Gain confidence with science software.
  - A. Effectively function as a teacher's aide in a local science class.
  - B. Observe a variety of local teachers within the live classroom setting.
  - C. Express a genuine pleasure with the possibility of of having the responsibility of teaching science.
  - D. Open attitude toward new experiences and challenges.
  - E. You should arrive at the realization that science teaching can be fun.
7. Manipulate ideas in a communicable way.
  - A. You should be able to state hypotheses of expected relationships.
  - B. Confident expression of your individual ideas.
  - C. Your science vocabulary should be accurate, current and functional.

SYLLABUS OF EDUCATION 470, HIGH SCHOOL READING  
Three Semester Hours Credit

Aims and Purposes:

This course is organized for the purpose of training prospective and practicing secondary teachers in recognizing:

1. The need for reading programs in high schools
2. The need for understanding reading difficulties encountered in content areas of high school curricula
3. That remedial and developmental reading programs can be effective in improving the quality of work of high school students

Objectives:

The objectives of this course are to bring teachers to the understanding that high school students need help to develop, extend and refine reading abilities and interest to optimum potentiality, and that developmental and remedial programs in reading should have these underlying concepts:

1. Intelligent reading is important in our way of life.
2. Reading is a life long process.
3. Learning to read is continuous growth.
4. Definite objectives are needed in teaching reading.
5. Many factors affect reading development and growth.
6. Purpose is important in reading.
7. Individuals vary in ability to read.
8. Diagnosis of pupils' needs is important for instruction.
9. Reading skills differ in different content fields.
10. Reflective reading requires reflective thinking.

Content:

The content of this course includes:

1. Survey of reading problems in high schools with a view to understanding the existing conditions:
  - A. Importance of reading in curricula and daily life.
  - B. Causes of retardation in reading
    1. Physical factors
    2. Emotional factors
    3. Intellectual factors: intelligence, language, experience
    4. Educational factors: inadequate teaching of reading, school deficiencies
2. Psychology of reading learning
  - A. The nature of reading
  - B. The relationship of the reading process and learning

1. Perception
  2. Theories
  3. Interference
  4. Transfer and application
3. Evaluation of reading achievement
- A. Survey of groups in general reading abilities
  - B. Diagnosis of an individual's disabilities
  - C. Standardized tests in specific areas such as vocabulary, comprehension, study, skills, intelligence
  - D. Informal inventories
4. Reading skills
- A. Word recognition
    1. Contextual techniques
    2. Phonetic techniques
    3. Use of structure analysis-visual
    4. Use of the dictionary
    5. Kinesthetic
  - B. Meaning and reading
    1. Words
    2. Sentences
    3. Paragraphs
    4. Interpretation and critical understanding
  - C. Study skills
    1. Selection and evaluation, main idea, answering questions
    2. Organization of reading materials for remembering and use
    3. Location and library skills
    4. Following directions
    5. Specialized skills in content areas, maps, graphs, etc.
5. Appreciation
- A. Literature and poetry
  - B. Creativity
  - C. Short story, novel, essay, biography and drama
6. Speed or rate
- A. Factors involved
  - B. Machines
  - C. Skimming
  - D. Purpose, material, skill adjustment or rate
7. The adolescent-the person being taught, his world, his interests, the teacher
8. Interest to read
- A. Response to environment
  - B. Discovery of interests
  - C. Extension of interest

9. Reading and the content areas
  - A. Vocabulary
  - B. Skills
  - C. Science, social studies, and health reading
10. Individualized reading and grouping
11. Organization and administration of reading programs
12. Reading centers and clinics

Procedures:

1. Observation of the English III section preceding this class period.
2. Testing of a group with complete analysis of difficulties, giving frequency count and recommendations to meet needs.
3. Visit some reading classes in junior high schools of this area.
4. Collect into a bibliography materials needed for a program of reading in high schools.
5. Write a paper on the needs for reading ability as to vocabulary, comprehension skills, and appreciation in content subject of interest.
6. Class instruction

Evaluation:

1. Grades will be based on tests given either weekly or bi-weekly.
2. Evaluation of paper in subject area.
3. Log kept of observation of class in English III.
4. Mid-term and final examinations

Skills Essential For Effective Study in High School

Basic Reading Skills:

1. Obtaining ideas and information from pictures.
2. Using word recognition techniques: contextural, visual, and phonetic.
3. Extending word recognition and meaning from context.
4. Developing sense of detail as to who, where, when, and what, as to persons, places, or time and action involved.
5. Identifying character traits.
6. Incorporating new words and phrases in spoken and written vocabulary.
7. Finding and interpreting descriptive words and expressions.
8. Effective oral reading: enunciation, phrasing, expression.
9. Grasping general meaning or significance of a passage.
10. Recognizing and increasing vocabulary through synonyms, antonyms, and multonyms.

Organizing:

1. Classifying
2. Generalizing
3. Comparing relative importance of ideas
4. Comparing and contrasting ideas gained
5. Justifying statements
6. Determining cause and effect relationships
7. Organizing related ideas into outline form
8. Summarizing

Thinking and reflecting:

1. Finding hidden meanings
2. Drawing inferences from implications
3. Interpreting figurative language
4. Creating vivid images: visual and auditory
5. Predicting outcomes based on clues
6. Using judgment
7. Evaluating critically

Extended or expanded study:

1. Reading rapidly to locate information; skimming for details, ideas
2. Skimming for preview of chapter or article
3. Locating information in research; indexes, dictionary, yearbooks, atlas, card catalog, almanacs, guide to periodicals, biographies, census, encyclopedias, bibliographies
4. Following oral and written directions
4. Reading graphs, maps, tables, charts, diagrams
6. Developing a technique of study such as SQ3R
7. Learning to organize for remembering
8. Using footnotes and building bibliographies
9. Identifying types of writing or patterns of writing such as in literature and textbooks



## SYLLABUS

## Methods and Materials for Teaching English

This course is a senior seminar. It is designed to be both a review of the materials each English teacher must know and an introduction to the various effective methods of conveying that material to the high school students.

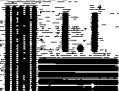
This is not a lecture course. Each student will be expected to come to class prepared to discuss the assignment for the day and contribute original ideas on the topic under discussion or to share ideas and new approaches gleaned from outside readings.

Objective:(General)

Recommendations for the preparation of teachers of English which focus upon personal qualifications, skills, and kinds of knowledge which contribute to effective teaching: the teacher's personality and general education; his skills in listening, speaking, reading, and writing; and his knowledge about and ability to teach language, literature, and composition.

Specific Objectives:

1. To discuss approaches to the subject matter usually included in a high school English curriculum.
2. To develop skill in asking good questions.
3. To give the students some opportunity to verbalize and synthesize their own values and give them experience in comparing or contrasting their own values with those expressed in some selected literature.
4. To discuss the complete English curriculum including listening, speaking, reading, and writing and give special attention to the nature of the language and rhetoric.
5. To discuss classroom management including interaction with individual students, ways to make presentations and discussions interesting and successful, and ways to foster creativity in the speaking and writing of students
6. To consider various affective objectives such as: the personal qualities which will contribute to the success of a teacher, a personal appreciation of the



COPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS-1963-A

many genres, of the styles of different time periods, and of the bulk of primary literature from a personal wide study and reading.

#### Texts:

Teaching English in High School: Bernstein

A Glossary for College English: Stevens

Essays in Language and Usage: Dean and Wilson (Reserve shelf)

English Journal (Junior membership in NCTE)

#### Activities:

1. Daily contributions to seminars on the English curriculum, classroom management, and the affective development of the English teacher.
2. Mastery of a minimum of 15 words from the vocabulary list each week.
3. Outside reading of a minimum of 50 pages each week on material related to the subject under discussion during that particular week.
4. Assigned research topics (short) for reporting to the class; e.g., discipline, gifted child, team teaching, etc.
5. Develop a lesson plan in grammar, writing, or one of the literary genre and teach it to the class.
6. Spend five weeks in an area school working in the classroom with an experienced teacher.
7. Sessions for discussion of experiences in the classroom.
8. To do a microteaching series on the asking of questions.

#### Evaluation:

1. Tests
2. Lesson plans presented
3. Class contributions
4. Recommendation of supervising teacher in classroom situation
5. Self-evaluation



## HISTORY AND PHILOSOPHY OF EDUCATION

### Purpose:

1. To acquaint the student with some of the formative ideas in the history of education in order that he may have a greater appreciation of rich heritage of the teaching profession.
2. To equip the student with some philosophical concepts, that will enable him to better understand and interpret his role in the teaching profession.

### Text:

Brubacher: A History of the Problems of Education

### Specific Requirements: (Due dates will be assigned.)

#### 1. History:

- A. To read chapters 1, 2, 5, 7, 8, 9, 10 and to do correlative reading (15-20 pages) per chapter with card report, and to participate in small group discussions leading to the building of ten test items per text chapter per group.
- B. To read either chapter 13 (Elementary Education) or chapter 14 (Secondary Education); depending on which is your major. Turn in a short, one-page reaction paper.
- C. To read any three other chapters, (x,y,z) from the remaining chapters (3, 4, 6, 11, 12, 15, 16, 17, 18, 19) and to individually be prepared to respond to topics in essay form on these three chapters on the final exam.
- D. To take final, consisting of ten objective test items (True-False, Multiple-Choice) per chapter, that is, items selected from the above accumulation that you have collectively turned in.

NOTE: All test items are to be done on 3x5 cards (no exceptions); use 4x6 cards for correlative reading notes; 8 1/2 x 11 paper for reaction report.

#### 2. Philosophy:

- A. To attend lectures/discussions and to take such philosophy notes as are necessary.

B. To write three papers (3-5 pages each) along the following lines, to be discussed further in class.

1. The defining of three philosophical concepts and how they relate to a practice(s).
2. To analyze some educational practice in terms of at least three philosophical concepts.
3. To state your own philosophy of education in terms of at least four concepts.

Evaluation:

20% on correlative reading reports (seven altogether)

20% on Final Test

60% on three papers (20% each)

Topics Covered:

1. Axiology

Location of values  
 Nature of values  
 To value  
 Relation of value to interest  
 Relation of interest to effort  
 Source of standards  
 Nature of ideals  
 The meaning of ought  
 Determining proper aims  
 Determining proper means  
 Intrinsic values  
 Extrinsic values  
 Improving values  
 Aesthetic values  
 Moral values  
 Spiritual values  
 Progress

2. Epistemology

Mind and experience  
 Nature of mind  
 Function of mind  
 Nature of ideas  
 Source of ideas

Intellectual  
Subject and object  
Character and experiencing  
Unit of experience  
Continuity of experience  
Mediated experience  
Purpose of experience  
Objectivity of experience  
Frame of reference  
Knowledge and truth  
Problem-solving  
Nature of subject matter  
Nature of knowledge  
Relation of interest to knowledge  
Knowing and doing  
Logical order of learning  
Certainty of knowledge  
Object in knowledge  
Location of truth  
Kinds of truth  
Tests of truth

### 3. Metaphysics

Nature of the universe  
Free will  
Determinism  
The existence of God

### MILLIGAN LEARNING DISABILITIES PROGRAM

The goals and objectives of the Milligan College Learning Disabilities Program are as follows:

1. To provide trained certified graduate teachers for children with learning disabilities in the predominately rural area of northeast Tennessee.
2. To provide the types of practicum experiences which would allow for a deeper insight into appropriate and necessary remedial techniques for these children.
3. To provide the opportunity for a divergent group of students to be observed and to allow the student teachers and practicum students to develop programs on individualized basis for each of them.

The philosophy of the departmental program is to provide teachers on the undergraduate level for children with learning difficulties in a predominately rural area. The philosophy further provides an in-depth look into the needs, effectiveness, and specific training required for teachers of children with learning disabilities.

The handicapped population of concern under the program goals is that of children with specific learning disabilities such as auditory receptive disorders, auditory expressive disorders, problems in reauditorization and revisualization.

The competencies to be developed to meet the goals and objectives of the proposed project are as follows:

1. To provide the instructional insight through the courses which would provide knowledge of diagnostic, tutorial, and remedial kinds of programs required by children with the numerous types of specific learning disabilities.
2. To acquaint the undergraduate students with at least basic diagnostic procedures through classroom and practicum experiences.
3. To provide the students in this program the opportunity to develop an ability to relate to other teachers and to perform in a resource manner.
4. To develop the ability to determine the appropriate remedial technique and be sufficiently aware of its ramifications to the extent that such a technique might be implemented.



The Learning Disabilities Program is designed for undergraduates only. Therefore, we are referring to only one period of study. The following competencies would be anticipated prior to a student's receiving a degree at Milligan College.

1. Be able to demonstrate by comprehensive and class examinations the different characteristics of children with specific learning disabilities and those identified as other types of learning disorders (i.e., mentally retarded, emotionally disturbed, auditorily impaired, visually impaired, etc.).
2. Be able to demonstrate an ability and knowledge of resources (Valitt, Fernald, Frostig, Kephart, Slingerland, etc.) and to effectively design, prescribe and implement a remedial program for children with such specific learning disabilities as auditory reception, association, and expressive deficits, visual-perceptive disorders, dyscalculia, etc.
3. Be able to demonstrate (in a practicum setting) the interpersonal skills required to relate to and work with teachers in the regular education classrooms.
4. Demonstrate sufficient knowledge of a diagnostic teaching process as to allow for modification of a child's program at any point the previously prescribed program appears not to be applicable to the identified problems.
5. Demonstrate a general knowledge of educational appraisal through observed participation and a knowledge of where to locate and secure the additional diagnostic services necessary for proper identification.

Most of the above competencies should be self-explanatory as well as indicative of the type of instructional pattern desired. However, in order to provide program unity the following steps would develop the sequence anticipated in the program.

First, in addition to the elementary education background, students would have the opportunity for observation of existing programs in classes as related to the survey course and introductory course. While enrolled in the procedures course, they would be required to "try out" several of the methods in order to provide realistic application of theoretical concepts.

Second, upon completion of the "core" courses described later, each student would, during their final year,



spend ten hours per week for one semester in a practicum setting. This would be in addition to previously having completed student teaching. This would provide the instructor with the opportunity to observe and evaluate not only the student's ability to apply the skills obtained but also a general insight into strengths and weaknesses of the training program.

Description of Courses in the Milligan College Learning Disabilities Program:

362-BASIC PRINCIPLES OF COUNSELING-Study of counseling processes that are applicable to the problems of normal individuals. Theories of education and personality are studied and attention is given to promising counseling techniques. Three semester hours.

411A-TEACHING OF READING-The objectives, materials, and techniques of reading in grades one through eight with emphasis upon developing readiness, preventing retardation, and planning a balanced reading program. The class includes lectures and supervised observation. Three semester hours.

404-EDUCATIONAL PSYCHOLOGY-Treatment of growth and development of children and adolescents with emphasis on the learning process and the evaluation of the educational program. Does not apply toward Psychology Major or Minor, except for those certifying to teach. Three semester hours.

454-INTRODUCTION TO PSYCHOLOGICAL TESTING-Theory and methods of measuring human behavior; including a survey of representative tests of ability and tests of typical performance. Three semester hours.

431-PSYCHOLOGY AND EDUCATION OF EXCEPTIONAL CHILDREN This course will be an introduction to and survey of the education of exceptional children and the psychological aspects of these exceptionalities. There will be a review of the literature which will introduce college teacher-education students to the characteristics of exceptional children. The exceptionalities which will be included are children with high mental ability, mentally retarded children, children with brain injuries, children with visual impairments, children with impaired hearing, children with speech handicaps, physically handicapped children, children who have emotional disturbances, and children with learning disabilities. The course will also include.

observations of institutions and facilities concerned with the education, health, and welfare of all types of exceptional children.

432-THE PSYCHOLOGY OF CHILDREN WITH LEARNING DISABILITIES-This course will include a survey of the literature on children with learning disabilities. There will be a discussion of the characteristics of children with dyslexia, exceptional handicaps, brain injuries, minimal brain disfunction and developmental aphasia. Students will discuss the diagnostic evaluation of the child including physical examination (general, neurological), academic history, group IQ tests, group achievement tests, samples of school work and the teacher administered diagnostic tests (Slingerland, Frostig, and Vallet). The course will also include discussion of the psychological evaluation with individual IQ tests, individual achievement and diagnostic measures, personality, and behavior measures in observation and language evaluation.

433-PSYCHOLOGY-EDUCATIONAL PROCEDURES FOR CHILDREN WITH LEARNING DISABILITIES-This will be a discussion of the curriculum development for the teaching of children with learning disabilities. It will include a discussion of remediation and basic skills such as reading and mathematics. Several approaches to the teaching of children with learning disabilities will be included such as perceptual-motor approach, developmental approach, and the linguistic approach. In each case the proponents, the materials, and case studies will be examined. There will be an effort to evaluate the approaches so that the techniques best suited to the classroom can be chosen by the students.

439-PSYCHOLOGY-PRACTICUM IN LEARNING DISABILITIES-Students will do an educational practicum in a learning disabilities classroom for two hours a day five days a week for one semester. The practicum is planned to be an experience for the student after he has done student teaching in the normal classroom

## SYLLABUS

## The Psychology of Children with Learning Disabilities

This course is designed as a study of behaviors identified in children as learning disabilities. Differentiation will be made between learning disabilities and other phenomena involving special education. Care will be exercised as to definition, identification and diagnosis of learning disabilities. Appropriate diagnostic tools will be studied.

Objectives:

1. The student will have a knowledge of the normally developing child.
2. The student will survey selected literature in the area of learning disabilities.
3. The student will be able to define and identify learning disabilities and differentiate learning disabilities from other areas of special education.
4. The student will become familiar with and be able to administer appropriate diagnostic tests.

Texts:

Learning Disabilities: McCarthy and McCarthy

Perceptual and Motor Development in Infants and Children:  
Cratty

Learning Disorders; Vol. IV: Bateman

## SYLLABUS

## Educational Procedures for Children with Learning Disabilities:

The course is designed to give competency to the student in diagnosing and remediating learning disabilities. Appropriate diagnostic tests will be administered; learning disabilities will be identified; and prescriptions for teaching will be made. Various remedial approaches will be studied.

Objectives: Students will have experience in the following:

1. Administration of diagnostic tests.
2. Identification of specific learning disabilities.
3. Prescriptions for remediation.
4. Demonstration of ability to teach using various methods and approaches.

Texts:

Learning Disabilities: Johnson and Myklebust

Preventing Failure in the Primary Grades: Engleman

Modifying Classroom Behavior: Buebley and Wallen

## CHAPTER IV

### CONCLUSION

The magnitude of the tasks outlined in the stated problem of this study caused the project directors to promise only progress toward a PBTE curriculum and not a completed product. The Milligan faculty observation of programs over the nation revealed that there were very few programs completed and being fully implemented at this time. This report on progress in developing a PBTE curriculum can become a part of the growing literature from other universities and colleges which are still developing the PBTE technique.

Hopefully, the experience of Milligan College faculty will be especially encouraging and helpful to small colleges similar to Milligan. Many of the PBTE programs which exist have involved great universities and million dollar budgets. Milligan College raises the question in attempting this study as to whether a small faculty and a limited budget could understand and implement the technique.

Since the Milligan College program is a developing one, this chapter will report from an evaluation by Dr. Gilbert Shearron, one of the OE model directors and a pioneer in the PBTE movement. Dr. Shearron began to talk about the PBTE technique in conference held some time before the beginning of this study and returned for a one day conference after reading the materials of this study. Milligan faculty believe that suggestions from Dr. Shearron's evaluation and others from Dr. Turkett, who attended the same conference, provide direction for continued progress in the development of the Milligan PBTE curriculum.

Improvement in PBTE educated students. A study was made of the National Teacher Examination scores to see if Milligan PBTE educated students tend to score better than those educated by conventional methods. Since the first modules were used in the summer of 1971, the project directors decided to study student scores of those who were Milligan educated and tested between 1969 and 1971 (two year period). The experimental group took some part of the PBTE program between 1971 and 1973 (also a two year period).

The mean score for the conventionally educated student ( $\bar{X}=1180.10$ ) proved to be lower than the mean score of the PBTE educated students ( $\bar{X}=1217.02$ ). See Table I for descriptive statistics.

TABLE I  
Descriptive Statistics of NTE Score

Year	N	Range	$\bar{X}$	s.d. <sup>2</sup>	s.d.
1969-71	147	791	1180.10	2268.47	149.22
1971-73	132	793	1217.02	22561.35	150.20

A t-test of the scores on the NTE of the 1969-71 students educated by conventional methods and the scores on the NTE of the 1971-73 students by PBTE resulted in a computed t-value of  $t=204$ , which is significant at the .05 level with d.f.=277 (see table 2).

TABLE II  
The t-Test of the Means of the 1969-71 Students' Scores and the 1971-73 Students' Scores on the NTE

Year	$\bar{X}$	$S\bar{x}$	$s\bar{x} - \bar{x}_2$	t-value
1969-71	1180.10	12.35		
1971-72	1217.02	13.12	18.02	2.04*

Table t.05 @ 277d.f = 1.96

Many Milligan teacher education students are transfer students. At this point it was impractical to make an analysis of aptitude relative to teacher training. Due to the fact that the average matriculating student at Milligan has been basically the same kind of student over the past few years, it is felt that the difference between the mean scores of the earlier group and the later group is due primarily to the improvement of the teaching procedure of the PBTE program. As has been indicated by the analysis of the t-test, it is felt that the PBTE program is a better technique for educating teachers which is demonstrated by the improved NTE scores.



### Consultants' evaluation

The one day evaluative conference held on June 20, 1973, included consultants, Dr. Gilbert Shearron and Dr. Keith Turkett, public school representatives, and Milligan faculty and students. Dr. Shearron stated his belief that Milligan had made real progress toward a PBTE curriculum since his earlier visits. He outlined strengths and weaknesses of the Milligan College program and allowed time for considerable dialogue about each point. He completed his presentation by listing ways which he believed the Milligan PBTE program might continue its development. Dr. Shearron wrote his statements in a letter dated June 27, 1973, which included the statement: "I was quite pleased with the progress you have made in moving toward a competency based program." His recommendations are quoted:

1. I believe that you need to separate your expected student goals and the outcomes from your program goals. I would interpret student goals and outcomes as what you expect students to be able to do. I would interpret program goals and outcomes as how the program is to operate. For example a program might be field based, individualized, and utilize a variety of media, while a student might be required to demonstrate skill and communication and knowledge of history.
2. I think that you need to develop a set of competencies that students at Milligan College are expected to demonstrate before they leave your program. These competencies should be accompanied by a set of criteria for evaluating each competency. I left some materials with you that addressed themselves to this topic. I might also suggest that you look at the assessment procedures that are being utilized at the University of Houston and at the University of Toledo. I believe that you already have the Weber State materials.
3. I would suggest that you give considerable attention to whether or not the learning activities (courses) really relate to your projected outcomes and competencies to be acquired. It seems to me that in the course translation approach you have used, there may be some discrepancy in the learning activities and your projected outcomes.
4. In the development of future learning activities I would hope that you would give some consideration to some alternative learning opportunities for students within these activities. For example, there perhaps should be both verbal and non-verbal means available to acquire certain knowledge.

Dr. Keith Turkett suggested that the Milligan curriculum should be constructed so each portion of it could be easily evaluated. He agreed to work with the Milligan faculty to build evaluation into the Milligan program. Considerable discussion followed about the need for evaluation and research in the PBTE movement.

#### Field test

A small portion of the material which is shown in the chapter on results has not yet been field tested. In addition to implementing suggestions from the consultants, Milligan faculty will field test all of the enclosed material. PBTE curricula need continuous revision and renewal. Certainly Milligan faculty will revise its PBTE curricula so that the transitional nature of the curricula will move in the direction of a program with greater perfection.

MILLIGAN conclusions. The year-long observation and the beginning of an effort toward a PBTE curriculum have been most rewarding. Milligan faculty have agreed on these conclusions as a result of this study:

1. The observations, the results from the students, and the evaluation from consultants causes the Milligan faculty to conclude that a small college can design a PBTE program which will be feasible and effective.
2. The results of a study of National Teacher Examination scores of Milligan students who had had components of a PBTE curriculum in their teacher education program show that these students have scored significantly better on the NTE.
3. Professors who are using PBTE components are gathering data on the student evaluation of the PBTE learning experience. Because of the necessity to standardize the tools for this evaluation, this data is not yet available. Preliminary and incomplete reports of student evaluation would indicate that the technique is well accepted by the students at Milligan College.
4. Milligan faculty find that there is a greater input into the teacher education curriculum from the public school community in a PBTE program. Since the curriculum is more field-centered, this allows more opportunity for public school teacher evaluation of student activities and more positive suggestions about the development of specific competencies in the Milligan College teacher education curriculum.



## APPENDIX 1

Notes on Weber State College  
Components as viewed by Clark and GeeDirector-Parkinson

1. Faculty at 24 clock hours per week
2. Essential staff people
3. Cannot do Wilkits in summer to remove incompletes
4. Must take final even if they pass the pretest (no deadlines)
5. Methods taught in academic area
6. Workshop for co-op teacher would be good
7. Tests cover objectives not experiences
8. Units do not write faculty out of them
9. Admission: GPA 2.25  
                   Test Battery (in academic areas)  
                   Cut scores at - 1 standard deviation  
                   Rejected if fail 3 sub tests  
                   ACT 19=test waiver
10. Lecture to establish set or motivate

Microteaching Director-Edwards

1. Students from schools (4th and 9th grades)
  - a. pay 75¢ per hour
  - b. come for 2 1/2 hour sessions
2. Work with the same 4 students
3. Films one day and critique the next day
4. 7 minute practice sessions and then a 15 minute final

Secondary Education-Adamson

1. Leadership service experience (30 clock hours)

Materials Production-Steiner

1. Produces replacement supplies
2. Stocks operation center
3. Promotes scheduled "Wilkit" revision

Field Coordinator-Low

1. Student teaching is full time or 2 quarters at 1/2 time  
    if taking a class
2. Student teach 5 of 7 hours per day or 4 of 6 hours per day
3. Academic Department must recommend their people
4. Information handled through the mail

5. Academic Department superior student teachers
6. Supervisor visits student teachers 5 to 7 times
7. Intern: GPA 2.5  
1/2 pay  
155 hours earned  
Superior at 1/2 time after 1st quarter
8. Leadership services experience (30 clock hours after student teaching)

Format Information:

1. More humanizing--Don't say, "you failed"...say "you have not passed" and give them more time.
2. Group cooperation rather than competition
3. Credit-no credit system
4. Interaction lab-Thiokol
5. Credit or no credit
6. Back up person for each "Wilkit"
7. Admissions: English College Board-English Composition Test  
Math-cooperative Math Test  
Science-Metro Adv. High School-Achievement Test  
Social Studies
8. Seminars: Lecture, motivation, Wilkit check out; questions-answers; discussion
9. Ed. 195 involves: 15 hours Elem. 15 hours Sec.
10. Normal registration
11. Non-sequential courses and/or Wilkits
12. Orientation at beginning of each quarter
13. If incomplete at end of quarter, they must sign up again to continue.
14. Competency score between 80-90%.
15. If a test is not passed, retake 1 week later. If still not passed, see the advisor to the Wilkit.
16. Wilkit Library includes multiple copies of materials required for Wilkit completion.
17. Curriculum Center includes games, texts, and kits.
18. Less emphasis upon philosophy as a separate body of knowledge. (They get this all along.)
19. Less emphasis upon curriculum (Trump Plan, IGE, SCIS, etc.)
20. Texas R & D materials-admissions assessment materials.

## APPENDIX II

Page 8 JOHNSON CITY PRESS-CHRONICLE, Sunday, October 8, 1972

**Progress is cited  
on Milligan grant**

Dr. Paul Clark, director of teacher education at Milligan College, reports significant progress in work sponsored by an Office of Education educational research grant awarded last spring.

According to Dr. Clark, the \$4100 grant, entitled "Developing a Performance Based Teacher Education Curriculum," was awarded for the purpose of establishing a performance based teacher education curriculum at Milligan.

Since the grant was awarded, Clark and his fellow committee members have been working to build the performance based program.